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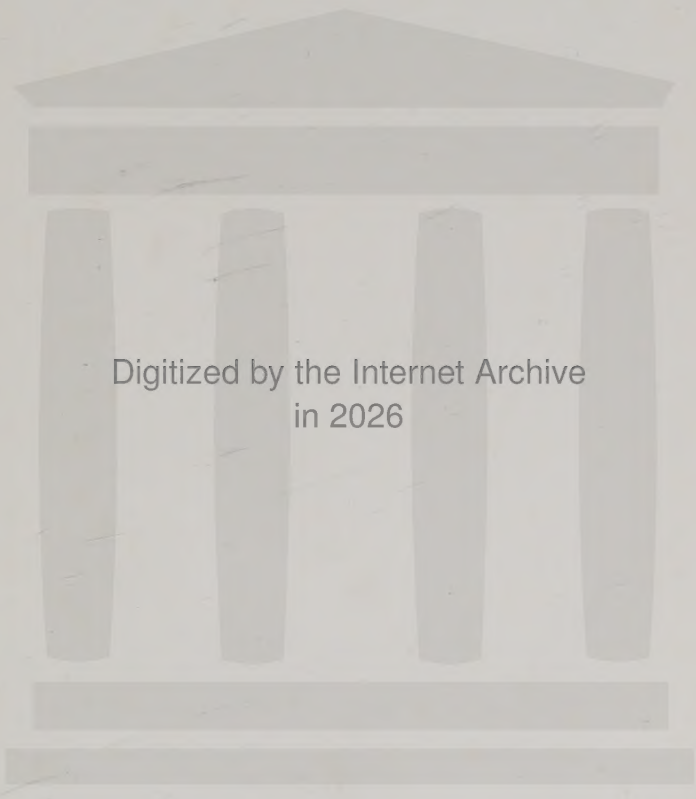
VOL. XI

ST. CATHARINE'S HILL, WINCHESTER



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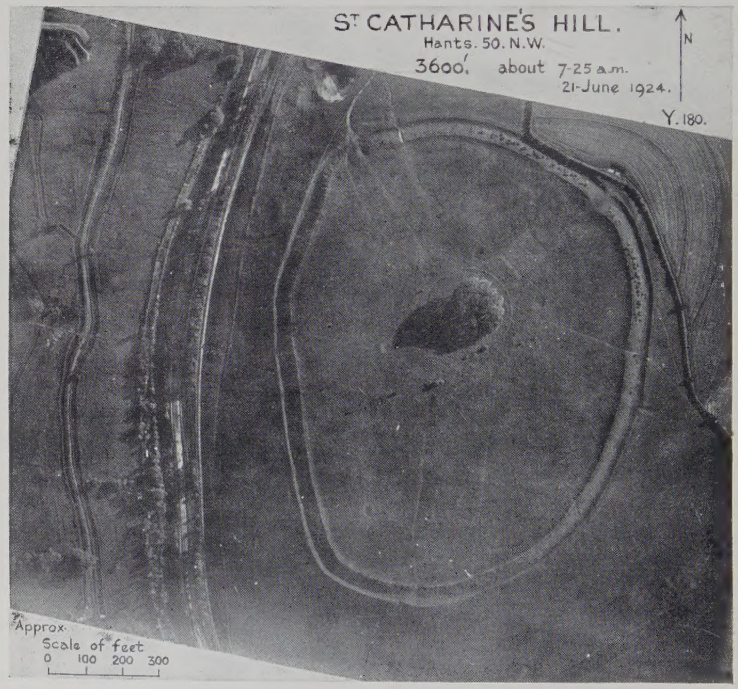

1. St. Catharine's Hill from College Walk.
2. St. Catharine's Hill from the Air.

Saint Catharine's Hill Winchester

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PREFACE

In the following pages an attempt has been made to survey the history and to trace the significance of St. Catharine's Hill, Winchester, through all the centuries from its first occupation by Early Iron Age Man to the present day. In so doing we have endeavoured to bring into a single whole evidence derived from a great variety of sources. The excavations of 1925-28 have supplied the basis of our conclusions for the prehistoric and mediæval periods, but they have been supplemented wherever possible by the use of primary and secondary written authorities, and in the last section on the post-Reformation period, which will, we hope, appeal especially to Wykehamist readers, we have been able to draw on that store of tradition which is part of the rich heritage of Winchester College. We have endeavoured, that is to say, to do something more than write an Excavation Report. It has been our aim to focus all the available evidence on the continuous story of a single very limited area, and to shew the effects upon it of those many changes and chances whose interplay in the course of centuries has produced the History of England. λέγωμεν οὖν ἀρξάμενοι.

C. F. C. H.
J. N. L. M.
C. G. S.

St. Catharine's Day, 1929.

THE
ST. CATHARINE'S HILL EXCAVATION COMMITTEE

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} For the Council of the Hampshire Field Club

CONTENTS

	Page
The St. Catharine's Hill Excavation Committee	vi
Introduction	1
PART ONE: THE EARLY IRON AGE	
The Defensive Earthwork	11
Section 1	13
The Rampart	13
The Ditch	16
Section 2	17
The Rampart	17
Finds in and under the Rampart	19
The Ditch	22
The Counterscarp Bank	24
Section 3, in the Ditch	25
The End of the Ditch and the Entrance Causeway	27
Further Excavations in the Counterscarp Bank	28
The Entrance	29
The Pits probably or certainly Earlier than the Entrance	30
Pit V	30
Pit M	30
Pit T	31
The Inturned Ends of the Rampart	32
The Revetment and the Clay Facing	34
The Heightening of the Rampart	36
The Kerbstones	37
The Material of the Heightening of the Rampart and Finds in it	38
The Walls	40
Wall A	40
Wall B	41
The Corner of the North Bay	41
Pit V and its Annexe	41
The Collapse of the Northern Revetment	44
The Corner of the South Bay and the Blocking of the Entrance	46

	Page
The Bays	50
Evolution and Chronology of the Entrance	58
Period A	58
Period B	60
Period C	61
Period D	62
Evidence for War and Peace	63
The Final Destruction	64
Note on the Use of Timber in Early Iron Age Fortifications	67
Note on the Development of Early Iron Age Hill Forts and their Entrances	72
The Early Iron Age Pits	85
Ditch 4	95
The Pottery	97
1. (*a*) Pit A, floor	97
(*b*) Pit B, rubbish-heap on edge of	99
(*c*) Typical Bases	100
2. (*a*) Finger-Print Decoration	100
Note on Finger-Print Ornament	104
(*b*) Punched Decoration	106
(*c*) Incised Decoration	106
3. (*a*) Bowls and Dishes	107
(*b*) Plain Rims and Shoulders	109
(*c*) Incipient Bead-rim types	112
(*d*) Pot-sherds shaped as Counters	113
4. Pottery from the Area	113
5. (*a*) Pottery of Hengistbury, Class B	116
(*b*) Pottery from Pit R	118
Objects of Chalk	123
Saddle Quern	123
Objects of Antler	125
Objects of Worked Bone	126
Brooches	127
Bronze Figure of a Bird	127
Object of Iron	134
Whetstones	134
Spindle-Whorls	134
Other Objects	135

Page

Report on the Mammalian Remains - - 135
Oyster-Shells - - - - - 136
Report on the Charcoal - - - - 137
Subsequent Remains - - - - - 137
Late Celtic or Belgic Pottery - - - 138
Romano-British Pottery - - - - 139
Roman Bronze Fibula - - - - 139
Roman Coin - - - - - 139

The Earliest Iron Age Culture of Britain - 140
Distribution-List of Domestic Pottery - - 163
Pottery with Late Bronze Hoards - - 167
Sepulchral Pottery - - - - 168

St. Catharine's Hill and the Origin of Winchester 169

PART TWO: THE MIDDLE AGES

St. Catharine's Chapel - - - - 191
Introduction: Literary evidence for the history of the Hill and Chapel - - - - 191
General Description of the Chapel - - 198
Building Materials - - - - 198
Flooring - - - - - 199
Roofing Materials - - - - 202
Doors and Windows - - - - 205
Structural Description - - - - 206
The Early Chapel - - - - 206
The Domestic Rooms - - - - 208
The Domestic Rooms: Note on comparative material - - - - - 211
The Later Chapel - - - - 212
Note on its addition to the earlier building - 212
The Chancel - - - - - 212
The Crossing - - - - - 213
The Transepts - - - - 215
The Nave - - - - - 216
Description of Elevations - - - - 219
Moulded Stone - - - - - 220
Architectural Evidence for the Date of the Later Chapel - - - - - - 222

Page

Roofing Materials - - - - - 224
Glazing Materials - - - - - 226

The Minor Earthworks - - - - 227
The Paths - - - - - - 231
The Mediæval and Later Pits - - - 232
The Smaller Holes, 19-25 - - - - 233
The Mounds - - - - - - 233
The Large Chalk-Pit - - - - 234

The Mediæval Pottery - - - - 234
I. Glazed - - - - - 234
II. Unglazed - - - - - 242
Mediæval Coins and Jettons - - - 243
Later Coins, etc. - - - - - 244
Objects of Metal.
Silver - - - - - - 245
Lead Finger-Ring - - - - 245
Iron - - - - - - 245
Report on the Mammalian Remains - - 247

On the History of Devotion to St. Catharine in Mediæval England - - - - 248

PART THREE: SINCE THE REFORMATION

The Origin and Early History of the Connexion with Winchester College - - - 259
Labyrinth and the Legend of 'Dulce Domum' - 269
The Eighteenth and Nineteenth Centuries: Conclusion - - - - - 281

APPENDIX I: Summary of Accounts, 1927 and 1928 - - - - 287
APPENDIX II: Subscribers to the St. Catharine's Hill Excavation Fund, 1927 and 1928 - - - - 288
INDEX - - - - - - - 291

LIST OF BLACK AND WHITE ILLUSTRATIONS

PART ONE

Fig.		*Page*
1.	General Map of the Site	xvi
2.	St. Catharine's Hill from the S.W.	1
3.	Sketch Map of Central Hampshire, shewing remains contemporary with the settlement on St. Catharine's Hill	4
4.	Cross Sections of the Rampart and Ditch (Sections 1-3) and of the Entrance (Section 4)	13
5.	Ground Plan of the Entrance	29
6.	Sections 5 - 10 in the Entrance	32
7.	Evolution of the Entrance	59
8.	British Hill Forts : Types of Entrance (comparative chart)	77
9.	Plans and Sections of Early Iron Age Pits	86
10.	Early Iron Age Pottery, 1 : pottery from Pits A and B, and typical bases	98
11.	Early Iron Age Pottery, 2 : pieces shewing finger-print, punched, and incised decoration	101
12.	Early Iron Age Pottery, 3 : rim and shoulder profiles of bowls and pots, and sherds cut as counters	108
13.	Early Iron Age Pottery, 4 : pottery from the Area	114
14.	Early Iron Age Pottery, 5 : cordoned fragments, and pottery from Pit R	117
15.	Objects of chalk, sarsen, bone, and antler	124
16.	Various small objects, Early Iron Age, and Romano-British fibula	126
17.	Pottery later than the Early Iron Age settlement	138
18.	Distribution - map of the Early Iron Age culture represented on St. Catharine's Hill, as shewn by domestic pottery	162

PART TWO

19.	Plan of St. Catharine's Chapel	199
20.	Sections in the Chapel floor, with lettered key-plan	200
21.	Elevations of the Chapel walls, with lettered key - plan	219

Fig.		*Page*
22.	Moulded stone	221
23.	Comparative chart of column-base mouldings	223
24.	Roofing materials: glazed and unglazed tiles, and leading	225
25.	Sections of minor earthworks	227
26.	Mediæval pottery 1, glazed: Classes A - D	237
27.	Mediæval pottery 2, glazed: Classes E - K	239
28.	Mediæval pottery 3, unglazed: Classes T - Z	241
29.	Mediæval objects of metal	245

PART THREE

30.	Drawing from the Chandler MS., *c.* 1460	261
31.	Stamps on clay pipes	266
32.	The treeless hill in 1692 (from an oil-painting in the Warden's Lodgings at Winchester College)	268
33.	The earliest known plan of Labyrinth	274
34.	Plan of Labyrinth in 1929	279
35.	Going on Hills (from a 19th century engraving)	281

36.	General plan of the excavations, 1925 - 1928	286

LIST OF ILLUSTRATIONS IN HALF TONE

PART ONE

Plate			*Facing page*
I.	1.	St. Catharine's Hill from College Walk	
	2.	St. Catharine's Hill from the air	*Frontispiece*
II.	1.	Face of Rampart and Ditch in Section 1, seen from East	
	2.	Face of Rampart and Ditch in Section 2, seen from East	17
III.	1.	Rampart in Section 1, seen from West	
	2.	Ditch and Counterscarp Bank in Section 2, seen from West	22
IV.	1.	Ditch in Section 1, seen from West	
	2.	End of Ditch in Section 3, seen from N.W.	27
V.	1.	View across Entrance from North	
	2.	View across Entrance from South	36

Plate		*Facing page*
VI.	1. Junction of Sections 2 and 4, shewing line of Kerbstones, seen from N.W.	
	2. Section 10 in S. Bay of Entrance, seen from South - - - - -	38
VII.	1. Wall B and the line of the S. revetment, seen from West	
	2. Hole 16 and Annexe, with Wall C, seen from South - - - - -	47
VIII.	1. Pit A from West, shewing ledge	
	2. Pit T from South, shewing hour-glass form	
	3. Pit P from West	
	4. Pit R from South - - - -	88
IX.	Bronze brooches, bronze bird-figure with explanatory diagrams, and pot R 10 - -	129

PART TWO

X.	Floor-levels in early Chapel: 1, near E. end, seen from East: 2, near archway opening from Chancel, seen from South - - -	202
XI.	1. S. wall of Chancel, seen from East, shewing offset at junction with S. wall of early Chapel	
	2. S. Pier of archway opening from Chancel into early chapel, seen from North, shewing slot in centre for wooden screen -	208
XII.	1. N.E. Tower Pier, seen from South	
	2. S.E. Tower Pier, seen from North - -	213
XIII.	1. E. Pier of S. Transept arch, S. side	
	2. Looking West from S.E. Tower Pier across S. Transept entrance blocked by later wall	
	3. N.E. Tower Pier, seen from West - -	214
XIV.	1. S. Wall of S. Transept, seen from East	
	2. W. Wall of S. Transept, seen from North -	216
XV.	1. Broken end of S. Nave wall, seen from West	
	2. Column - base built into S. Nave wall, seen from S.E. - - - -	217
XVI.	Mediæval silver coins, jettons, farthing token, lead pack-seal, and lead finger-ring - -	243

LIST OF PRINCIPAL ABBREVIATIONS USED IN REFERENCES

A.-F.	F. Arnold-Forster, Studies in Church Dedications (3 vols., 1899).
A.U.H.V.	Die Altertümer unserer heidnischen Vorzeit (Mainz, 5 vols., 1858 - 1911).
Ant. Journ.	The Antiquaries' Journal.
Arch.	Archæologia.
Arch. Cambr.	Archæologia Cambrensis.
Arch. Journ.	The Archæological Journal.
(Fox) *Arch. Cambr. Reg.*	Cyril Fox, The Archæology of the Cambridge Region (1923).
B.G.	Cæsar, De Bello Gallico.
B.M.	British Museum.
B.S.P.F.	Bulletin de la Société Préhistorique Française.
C.P.F.	Congrès Préhistorique de France.
Cook.	A. K. Cook, About Winchester College (1917).
Evans.	Sir John Evans, Coins of the Ancient Britons (1864).
Field Archæology.	J. P. Williams Freeman, Field Archæology as illustrated by Hampshire (1915).
Glastonbury.	A. Bulleid and H. St. George Gray, The Glastonbury Lake - Village (2 vols., 1911, 1917).
G.G. Report.	Report on the Excavations at Grime's Graves, Norfolk, 1914 (Prehistoric Society of East Anglia, 1915).
H.F.C.	Proceedings of the Hampshire Field Club and Archæological Society.
Hengistbury Report.	J. P. Bushe-Fox, Excavations at Hengistbury Head, Hampshire (Reports of the Research Committee of the Society of Antiquaries of London, no. III, 1915).
J.B.A.A.	Journal of the British Archæological Association.
J.R.S.	Journal of Roman Studies.
J.R.A.I.	Journal of the Royal Anthropological Institute.
(Déchelette) *Manuel.*	J. Déchelette, Manuel d'Archéologie (Paris, 4 vols.). *N.B. Quotations are throughout from the Second Edition*, 1924 - 7.
P.Z.	Prähistorische Zeitschrift.
P.P.S.E.A.	Proceedings of the Prehistoric Society of East Anglia.
P.S.A.	Proceedings of the Society of Antiquaries of London. Second Series.
P.S.A. Scot.	Proceedings of the Society of Antiquaries of Scotland.
R.V.	Reallexikon der Vorgeschichte, herausgegeben von Max Ebert (Berlin, 14 vols., 1924-29).

Richborough I, II.	J. P. Bushe-Fox, Reports on the Excavation of the Roman Fort at Richborough, Kent (Reports of the Research Committee of the Society of Antiquaries of London, nos. VI - VII, 1926, 1928).
(Schumacher) *S.K.R. I.*	K. Schumacher, Siedelungs- und Kulturgeschichte der Rheinlande, band I, 1921.
(May) *Silchester.*	T. May, The Pottery found at Silchester, 1916.
S.A.C. or *Suss. Arch. Coll.*	Sussex Archæological Collections.
Swarling Report.	J. P. Bushe-Fox, Excavation of the Late-Celtic Urnfield at Swarling, Kent (Reports of the Research Committee of the Society of Antiquaries of London, no. V, 1925).
V.C.H.	The Victoria County History.
W.A.M.	The Wiltshire Archæological and Natural History Magazine.
Williams Freeman.	See *Field Archæology*.
Win. Coll., W.C.A.S.	Winchester College, its History, Buildings, and Customs (Winchester College Archæological Society, 1926).

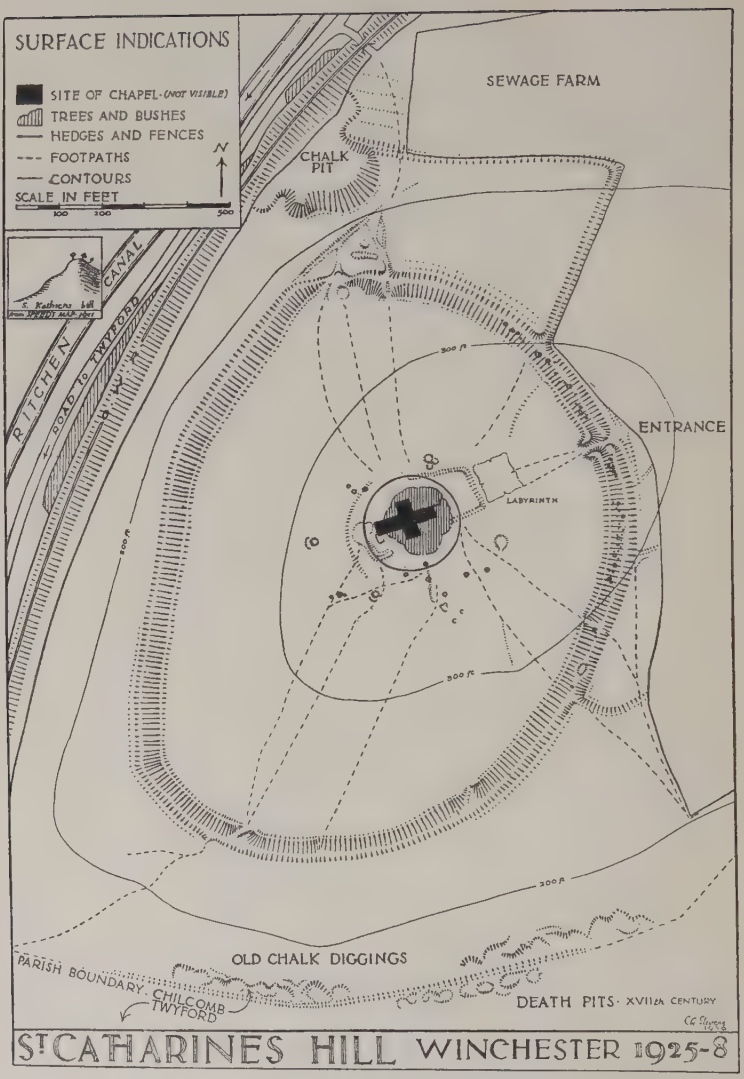


FIG. 1. GENERAL MAP OF THE SITE.

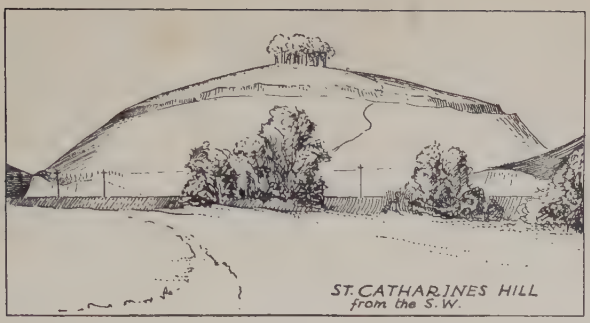


Fig. 2.

St. Catharine's Hill

INTRODUCTION

ST. CATHARINE'S HILL, in the parish of Chilcombe near Winchester in Hampshire (6-in. O.S. map ref. Hants, sheet L, N.W.), is a steep-sided hill of oval form (plate I, 2, and fig. 1), jutting out from the irregular edge of the chalk uplands that bound the middle Itchen valley on the east. Its summit, which lies just one mile south by west of Winchester Cathedral, rises to 328 ft. above sea-level, and the fall to the Itchen water-meadows on its western side is in places as steep as 1 in 3.

The old Navigation Canal passes close to the foot of the hill, with the new Winchester—Twyford road immediately above, while nearly parallel to both of these the Didcot, Newbury, and Southampton branch of the Great Western Railway runs in a cutting which pierces the lower slope of the hill-side. The wide depression of the Chilcombe Valley, some five furlongs across and at right angles to the Itchen, separates the hill on the north from St. Giles' Hill, which overlooks the eastern end of the City of Winchester, while on the south and south-east it is cut off from the main expanse of Twyford Down by a curving and steep-sided combe; up this the boundary-ditch of the parishes of Chilcombe and Twyford runs between some old chalk-diggings and the irregular mounds which mark the common graves of the local victims of the Plague of 1666 and are known as 'Death Pits.'

At the head of the combe the north-eastern side of the hill is connected by a narrow saddle with the eastward-running ridge, forming the culmination of Twyford Down, along which a prehistoric trackway passes towards the South Downs of Sussex; and this is also closely followed here by a Roman and a mediaeval and modern road, though these soon turn southward by way of Morestead towards Bishop's Waltham and Portsmouth Harbour. This saddle, the only link between the hill and the main chalk plateau, thus connects it directly with an important line of communication; but it is now occupied, together with most of the northern hill-side, by the Winchester Corporation Sewage Farm, and the principal modern approach is between this and the railway, by a footpath which makes the steep ascent close to the large chalk-pit which is cut into the northern face of the hill.

The clump of beech-trees at the highest point of its almost level top, and the ring of ancient earthwork around its brow, make the hill with its bold outline a striking and familiar feature of the southward view from Winchester (plate I, 1), while it would form the first natural stronghold of defence against an invader advancing up the Itchen valley from Southampton Water, which is second only to the Kentish harbours as a place of entry into England from the Continent, as geography and history alike testify.

The upper Itchen drains a wide basin in the chalk of central Hampshire, and St. Catharine's Hill, guarding the narrowest part of the valley down which, after first a northward and then a westward course, it flows southward to the sea, is under primitive conditions not only the bulwark but also the natural centre of this whole area. The importance which its successor in occupation, the City of Winchester, has had bears out the evidence of physical geography, and inevitably suggests that it was in prehistoric times likewise a capital point.

This suggestion has been amply verified by the excavations recorded in this volume. They have revealed the existence of a Settlement on the summit, open at first and then fortified by the girdle of earthwork, which lasted perhaps from the 6th to the 2nd century B.C., and thus covers the least known period of the Iron Age in this country.

The epoch of the introduction of the knowledge of iron into Britain marks the last great turning-point in her history before the Roman conquest. Before the middle of the 1st millennium

B.C. the comparative isolation of Middle Bronze Age culture was brought to an end by the beginning of a series of immigrations, which ceased only with the consolidation by Augustus of the Roman power in Gaul. They not only brought in the knowledge of iron-working, but ultimately made Southern Britain in speech and predominant race an integral part of the Celtic world of Central and Western Europe. The Celtic culture, short-lived as it was, brought Britain in the beginnings of her historic period into a Continental connexion close enough to make absorption in the Roman Empire inevitable.

It is probable that the earliest of these immigrations are attested by certain foreign types of late bronze weapons, and within the same period seems to fall the appearance of new forms of cinerary urn, those of barrel, bucket, and globular shapes. The precise ethnology, indeed, of the makers of these urns is as yet uncertain, but their culture stands close enough to that of their apparent successors for some to have considered the two identical or at least overlapping.

The arrival of the latter, whose use of iron is not open to doubt, has been generally dated near the end of the Continental Hallstatt period (round about 500 B.C.); they exhibit certain variations of culture, but the village at All Cannings Cross, Wilts, is probably typical enough, and it was these people who first settled on St. Catharine's Hill and subsequently fortified it. They can be traced also on a number of sites in the surrounding country, notably at Stanmore and Worthy Down, and probably formed a far from negligible element in the subsequent population of southern Britain, throughout most of which their culture seems to have lasted well into the ensuing period of La Tène.

In fact, the chalk country of Hampshire can hardly have been touched by further immigration till towards the end of this period, though Celtic invaders appeared as far north as Yorkshire, and there was movement into the island from the south-west. That the latter reached this region has not been attested, and while Belgic tribes were settling in south-eastern Britain from about 100 B.C., it was not till after Caesar's invasions of 55-4 that new immigrants, also apparently from Belgic Gaul, arrived west of the Sussex Weald.

The possibility of a connexion between their coming and the abrupt end of the Settlement on St. Catharine's Hill will

be discussed in due course; it is anyhow certain that the site was no longer inhabited when Belgic culture was established in the neighbourhood, and to the latter in fact belong the first appreciable traces of occupation on the site of Winchester. From now onwards population began to concentrate there in

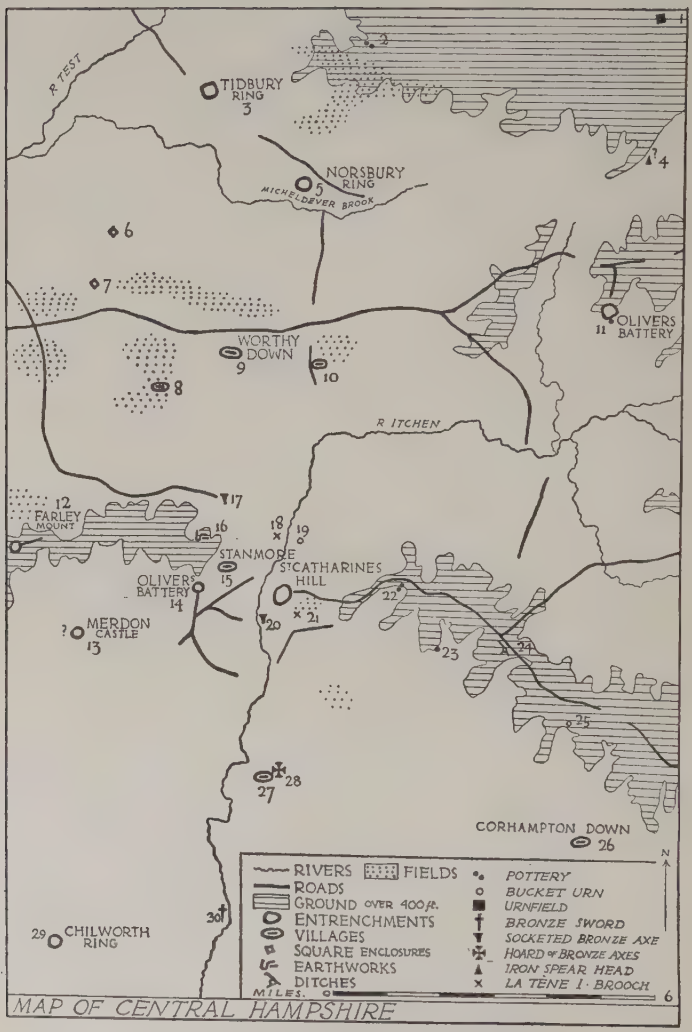


FIG. 3.

Map of Central Hampshire, showing material contemporary with the Early Settlement on St. Catharine's Hill.

the valley below, and the hill-fortress was superseded, if indeed this had not already happened.

Accordingly, the map (fig. 3),[1] which seeks to emphasize the nodal position of St. Catharine's Hill during its period of

[1] The old ROADS shewn on this map are marked after Hawkes, *Old Roads in Central Hants*, *H.F.C.* IX pt. 3, p. 324 ff, and Burne, *Old Track from Walbury Camp to Tidbury Ring*, *ibid.* VIII pt. 1, p. 104 ff, with some modifications due to subsequent work, and additions from unpublished air-photographs by courtesy of Mr. O. G. S. Crawford. The FIELDS are also from the latter source, some being marked on the map in his *Air Survey and Archaeology*, Ordnance Survey Professional Papers, new series No. 7 (1924). The other items on the map are numbered, and the references to authorities are as follows :—

1. URNFIELD (bucket urns, late Bronze Age type), Dummer : *H.F.C.* V, pp. 55-6.

2. POTTERY (Hallstatt type), Roundwood nr. Micheldever, in ditch of disc-barrow with some worked flints : *H.F.C.* IX, pt. 2, pp. 191, 198-209. (Winchester Mus.).

3. TIDBURY RING : Williams Freeman, pp. 246, 412.

4. IRON SPEARHEAD (said to be of Early Iron Age type), nr. Preston Candover, in some connexion with an interment (indeterminate) : *H.F.C.* II, p. 286.

5. NORSBURY RING : Williams Freeman, pp. 247, 388.

6, 7. SMALL SQUARE ENCLOSURES, Brockley Warren : from unpublished air-photographs through Mr. O. G. S. Crawford, who advocates a late Bronze Age date for such enclosures in *Ant. Journ.* II, No. 1, p. 27 ff.

8. BRITISH VILLAGE SITE, nr. Littleton : map in *Air Survey and Archaeology*.

9. BRITISH VILLAGE, Worthy Down : *H.F.C.* X, pt. 2, p. 178 ff. (finds in Winchester Mus.).

10. BRITISH VILLAGE SITE, Abbot's Worthy : map in *Air Survey and Archaeology*.

11. OLIVER'S BATTERY, Abbotstone Down : Williams Freeman, pp. 299, 392. The present writer found coarse Iron Age POTTERY in a rabbit-scrape on the earthwork in 1925.

12. CAMP, Farley Mount : Crawford, *Wessex from the Air*, pp. 102-3.

13. MERDON CASTLE (the earthwork outside the Norman Keep is perhaps British) : *H.F.C.* I, pt. 1, p. 25 ; II, p. 14 ; Williams Freeman, pp. 255, 384.

14. OLIVER'S BATTERY, nr. Winchester : *ibid.* pp. 254, 393. See below, p. 176.

15. SETTLEMENT (Hallstatt period), Stanmore, Winchester : *H.F.C.* X, pt. 1, p. 63 ff (excavated, and well-preserved oven found : finds in Winchester Mus.).

16. EARTHWORKS, Teg Down : Crawford, *Wessex from the Air*, p. 110.

17. SOCKETED BRONZE AXE (late Bronze Age), WEEKE : *Ant. Journ.* IV, pt. 2, p. 151. The type, with loop on face, is certainly exotic, and probably connected with a winged type of the Swiss Lake-dwelling culture, *e.g. Brit. Mus. Bronze Age Guide*, fig. 124, right.

18. LA TÈNE I BROOCH, High St., Winchester : see below, pl. X and pp. 127, 182.

19. BUCKET URN (late Bronze Age type), St. Giles' Hill, Winchester : Clay. *W.A.M.* XLIII, p. 323 and pl. I (Winchester Mus.).

20. SOCKETED BRONZE AXE (late Bronze Age), nr. G.W.R. Viaduct, S. of Winchester : *P.S.A.* XXII, p. 249. This short bulbous type is exotic, and seems to be Irish (Winchester Mus.).

21. LA TÈNE I BROOCH, Twyford Down : see below, pl. X and p. 127 (Winchester Mus.).

22 POTTERY (Iron Age, coarse), Telegraph Hill nr. Chilcombe : unpublished (Winchester Mus.).

23. POTTERY (similar, some with finger-print ornament), 1 mile S. of Cheesefoot Head : unpublished (Winchester Mus.).

24. EARTHWORKS, Lane End Down : Crawford, *Wessex from the Air*, p. 228.

25. BUCKET URN (perhaps Hallstatt period), nr. Preshaw : *Ant. Journ.* VIII, No. 1, p. 98 (Brit. Mus.).

26. BRITISH VILLAGE, Corhampton Down : *H.F.C.* VI, pp. 253-5 ; *Hants Chronicle*, Apr. 18, 1908, p. 9 (excavated by Lt.-Col. Hawley).

27. BRITISH VILLAGE (pit-dwellings), Colden Common : unpublished information from Mr. O. G. S. Crawford (revealed in side of gravel-pit).

28. HOARD OF BRONZE AXES (palstaves and socketed), Colden Common : the types are late Bronze Age (Winchester Mus.).

29. CHILWORTH RING : Williams-Freeman, pp. 259, 368 (excavated in 1927 but not dated).

30. BRONZE LEAF-SHAPED SWORD (late Bronze Age), Checkenhall nr. Bishopstoke : *H.F.C.* III, pp. 265-6. A not very remote ancestor of Peake's type G (Hallstatt) and evidently exotic (Winchester Mus.).

occupation by giving the distribution of strictly contemporary archaeological material, marks nothing which cannot be dated before the 1st century B.C., just as it marks nothing earlier than the transition from the Bronze Age. The beginning of the Iron Age can hardly have been marked by any one sharp break in continuity, and it must have been in the period of initial transition that occupation on the hill began; consequently, the late bronze weapons and bucket urns need not be too early for inclusion with the material of the Iron Age proper—Hallstatt and later types of pottery, and La Tène I brooches of the 5th to 3rd centuries B.C.

The roads marked are trackways which do not admit of definite dates, but though doubtless often of altogether remoter origin they must have been in full use during this period. Some of the earthworks are not exactly dated, but while the small square enclosures may be suspected to be sometimes earlier than the full Iron Age, the hill-fortifications, if those on St. Catharine's Hill be typical, date nearer the end than the beginning of the period represented. The unfortified villages often continued to exist and probably grew considerably in the subsequent centuries, and the field-system associated with them, now revealed by air-photography, had perhaps not reached its fullest extent as early as this. However, the method adopted shews, as far as is possible, the place occupied by the hill settlement in the life of the contemporary countryside.

That life, indeed, inasmuch as it continued and increased under Roman rule, far outlasted the effective occupation of the Hill: Winchester as Venta Belgarum became the capital of the district, and the relics of this period from the older site are of the scantiest.

It remains thus without further history until the early 7th century A.D., when we find it forming part of the Manor of Chilcombe which King Kinegyls of Wessex granted for the support of the Church. The land continues to this day in Ecclesiastical hands, and in the Middle Ages the history of the site is what might be expected from its position on the outskirts of so important a religious centre as Winchester.

Before the middle of the 12th century, a small Chapel, that had been already erected on the summit at some uncertain date, probably not long before, was used to form the eastern portion of the chancel of a much larger chapel in the late Norman style, cruciform with a central tower, which was dedicated to St.

Catharine and gave her name to the hill. At the east end of this building was the dwelling of a guardian, and certain boundary ditches—there seems to have been a cemetery—seem also to belong to the lifetime of the chapel, which lasted throughout the Middle Ages till a date in the reign of Henry VIII. As will be seen, its final years present certain problems, but the destruction effected apparently between 1538 and 1540 by Sir Thomas Wriothesley, as tenant of the Manor, was almost if not quite complete, and after the chapel's disappearance the hill is next known to us in the early years of Elizabeth as the playground of the boys of Winchester College. It continued to be so used until 1868, in spite of some degree of military interruption in 1762, to which the planting of the clump of trees is ascribed, and tradition has attributed to Wykehamical hands the cutting of the well-known Labyrinth or maze just east of the clump, and of the less familiar 'Domum Cross' on the outer slope of the prehistoric ditch to the south-east. The intimate connexion with the College survives in certain modern ceremonies enacted on 'Hills' (as it is known to Wykehamical terminology), and in the enduring tradition of Wykehamical sentiment.

It was in fact among certain Old Wykehamists then resident in the University of Oxford that the project of the excavations here recorded was first formed early in 1925 : the approval of the Warden and Fellows of Winchester College, and also of the Hampshire Field Club, was signified, and permission was given, with the agreement of the tenant, Mr. I. Stratton, by the Ecclesiastical Commissioners as landlords, and by the Ancient Monuments Department of H.M. Office of Works.

In two seasons of privately conducted excavations in 1925 and 1926 the site of the chapel was re-discovered and much of its remaining fabric revealed. An agreement was then made between the excavators and the Hampshire Field Club, by which a Joint Committee was set up to carry out the exploration of the Iron Age settlement as well as that of the remainder of the chapel buildings. By the generosity of the Club and of numerous subscribers, enough money was placed in the hands of Mr. S. R. Humby as Treasurer in 1927 and 1928 to enable the present writers to conduct excavations in both these seasons on a much larger scale. Their Report, here munificently published by the Club in the series of its Proceedings, embodies the results of the work of all four years, and a complete survey of the

literary and archæological evidence for the history of the Hill from the earliest period of its occupation.

The authors have collaborated as fully in compiling it as on the field of excavation. The drawings are nearly all by Mr. Stevens, and the photographs were taken by Messrs. H. W. Salmon & Son of Winchester, except plates I 1 and X 1, taken by Mr. Stevens, plates X 2 and XIII 1 by Mr. Humby, plate I 2 by the Royal Air Force, Flower Down, through Mr. O. G. S. Crawford, and plates IX 3 and 12 and XVI by Mr. C. O. Waterhouse of the British Museum and Mr. G. Chaundy of the Ashmolean.

Gratitude is due to all those who enabled the scheme of excavation to be realized, especially the authors' colleagues on the Committee, Sir Charles Close, Mr. O. G. S. Crawford, Mr. F. Warren, and Dr. J. P. Williams Freeman; also to the voluntary helpers in the first two seasons whose names appear below, and to the many subscribers to the Excavation Fund, largely Old Wykehamists, especially to an anonymous benefactor, who contributed more than a quarter of the total sum obtained (see Appendix II).

The workmen employed, who belonged to Winchester and the neighbourhood, did their part with keenness and intelligence. Acknowledgement is made in various sections of the Report to the advice and opinions of a number of authorities, and the work owes the indispensable preliminaries of publication to the Rev. F. N. Davis, Editor of these *Proceedings*. An especial debt of gratitude for his ungrudging labours in helping to compile the Index is due to the Rev. Alfred Snell.

The following assisted the authors in the work of excavation in 1925 and 1926:—Messrs. F. J. Birkbeck, G. I. F. Fiennes, E. Hepher, P. P. Hepher, M. Hope, S. R. Humby, M. S. Leigh, H. C. Lewis, K. S. P. McDowall, and C. E. Stevens.

Brief interim Reports have appeared every winter in *The Wykehamist*, and also in Vol. X, pt. 1, of these *Proceedings*, as well as in the annual Reports of the Earthworks Committee of the Congress of Archæological Societies.

The objects found have been presented, with the consent of the Ecclesiastical Commissioners, to the Winchester City Museum.

PART ONE

THE EARLY IRON AGE

"On St. Katharine's hill juxta Winton is a Campe: single work and single graff: neither round nor square: but according to the ground of the Hill."

John Aubrey (1626 - 1697).

MSS. in the Bodleian Library.

PART ONE

THE EARLY IRON AGE

A BRIEF sketch of the nature and importance of the occupation of the hill in this period has already been given; there is nothing to shew that it was inhabited at any earlier date, and the remains discovered attest the presence of people of Iron Age culture for an estimated period of some four centuries from late Hallstatt times to a date in the middle La Tène period.

The remains of the settlement will be described in the following order:—

1. The Defensive Earthwork encircling the hill.

2. The Entrance through these on the north-east side.

This section is followed by Notes on the use of timber in Early Iron Age fortifications, and on the development of British Hill Forts of the period and their defended Entrances.

4. The Pits and other traces of habitation within the defences.

5. The Pottery and Objects found in the excavation of the above and elsewhere on the hill.

An endeavour will be made, in the essays which conclude this part of the Report, to bring the evidence obtained by these excavations into relation with that from other sites of the period, and to fix, as far as is at present possible, its position in the pre-history of the country, with special reference to the origin of the City of Winchester.

THE DEFENSIVE EARTHWORK

The earthwork forms a complete ring (see fig. 1), properly broken only on the north-east by the original Entrance, which is flanked by the inturned ends of the rampart. The smaller breaches which in six places have been made by modern paths do not seriously interrupt the continuity of the work. It encloses a roughly oval area of some 23 acres, of which the highest point of the hill lies rather north of the centre. On the north-east side the hill slopes gently down to the saddle

which connects it with the main chalk plateau to the eastward, and across this slope the earthwork runs in a broad curve some little distance above the 300 ft. contour line. The rampart is here at its highest, and effectively commands the only practicable approach over the saddle and up the slope to the Entrance. The latter lies in the middle of this part of the earthwork's course, on the crest of the natural camber of the slope, and from here the rampart curves away to lower levels on either side, so as to follow the true brow of the hill all round. It thus lies rather nearer the 200 ft. than the 300 ft. contour line on the south and west, and in fact it passes round the larger part of the hill very considerably below the summit, the lowest point on its course being at the south-west. This is due to the shape of the hill; the earthwork was evidently planned to take the line from which the contours allow most control of the ground beneath. Its builders clearly knew and guarded against the danger of 'dead ground.' It thus falls into Class B of the Earthworks Committee's Scheme of Classification: "Fortresses on hill-tops with artificial defences, following the natural line of the hill." [1]

It has been described by T. W. Shore in his list of ancient camps in Hampshire,[2] in which the height of the summit of the hill above the mean level of the earthwork is noted, and by Dr. J. P. Williams Freeman in his classified list of Hampshire Earthworks,[3] as well as by the same author in his book *Field Archaeology as Illustrated by Hampshire* (1915),[4] where he gives the most complete summary of the surface features of the hill prior to the present publication.

The fortification consists of three parts, the Rampart, the Ditch immediately outside it, and on the outer edge of the ditch a low bank, sometimes entirely absent, and on either side of the Entrance double, which will here be referred to as the Counterscarp bank. The term "counterscarp" belongs to the classical vocabulary of the military engineering of a more recent age, in which it properly means the outer *slope* of the ditch, but such a usage as is here employed has been often adopted

1. *Scheme for recording Ancient Defensive Earthworks and Fortified Enclosures*, Congress of Archaeological Societies 1910, p. 7. Cf. the observation of Aubrey quoted above (p. 10), paraphrased by Gough, *Camden's Britannia* (1789), I, p. 137.

2. *H.F.C.* I, Part 1, p. 22 ff.

3. *Ibid.* VI, p. 343 ff.

4. Pp. 251-254; Plan and concise description, p. 403. Under Class B in list according to the above classification, p. 335: under Class A ("Fortresses surrounded by treeless country suitable for a pastoral people"), in list of Earthworks classified according to use, p. 340.

by modern archaeologists,[1] and is not too loose to be permissible, the term "glacis," which strictly means the slope outside the ditch, being obviously inappropriate to a prehistoric work of this character.

Two sections were cut through the whole earthwork; Section 1, cut in 1928, being set at right angles across its line from a point 530 ft. S. 40° E. of the summit of the hill, and Section 2, cut in 1927, similarly set from a point 415 ft. E. 15° N. of the summit of the hill, 540 ft. N. 8° E. of the setting-out point of Section 1, and immediately south of the entrance.

SECTION 1 (Fig. 4, No. 1).

Section 1 was 4 ft. wide and 110 ft. long. The natural slope of the ground to the S.E. is here about 1 in 9. The top of the existing rampart is 5 ft. 6 ins. above the ground-level at the inner end of the section, and 20 ft. 3 ins. above the modern ground-level in the ditch. There is no counterscarp bank here, as the slope of the hill provided sufficient strength without one, and the outer lip of the ditch, which must originally have been a sharp angle some 1 ft. 6 ins. above the present ground-level, has been eroded to a gentle slope by drainage into the ditch.

The Rampart. (Plates II, 1, and III, 1.)

The cutting through the rampart disclosed most interesting features, which enable the method of its construction to be clearly appreciated.

The old turf-line, a band of dark soil 1 ft. in average thickness, was discovered to run under the make-up of the rampart from a point 14 ft. to a point 46 ft. from the inner end of the section. Outside the latter point the excavation for the ditch had evidently begun, while inside the former point it was no less clear that the surface soil had been scraped away for some distance to provide material for the rampart in addition to that obtained from the ditch. The slight hollow in the surface formed by this scraping can be seen almost all round its course, its size varying in proportion to that of the rampart: it is only absent where, owing to the steepness of the slope, the inner face of the rampart is relatively low, as on the South and West (see p. 19).

1. *e.g.* A. Keiller, in *Wessex from the Air*, p. 89.

The rampart was found to be composed of no less than seven different tips or shoots, each easily distinguishable from the others by the quality of its material. These tips were separated from each other by thin sharp lines of demarcation, unlike such lines as would separate chalky strata of different periods, but affording unmistakeable evidence that while the construction of the rampart took place at a single period, it was carried out by the successive dumping of tips of material of different qualities and from different sources, the superposition of which was easily traceable.

It is well to stress the fact that the lines of demarcation between these tips were not thick seams of dark mould representing laid turf, but shewed merely as sharp surface-lines, here and there emphasized by a thin streak of brown soil. Each tip had evidently been piled to an even surface before being overlaid by the next.

> Evidence has been found on other sites for the covering of such successive tips of rampart-material by layers of turf, to give them stability and to prevent slipping; the seams of dark mould so formed have the appearance of occupied surface strata, and in these cases independent evidence has been required to prove that the rampart was all of one date. Such seams were noted by Pitt-Rivers in the Wansdyke [1] and by Mr. and Mrs. Cunnington in the rampart of Oliver's Camp,[2] and apparently also in the first addition to that of Figsbury Rings,[3] though in the last case they seem to have been notably thinner than the bands of turf-mould separating the additions to the rampart-material dating from distinct periods. At Cissbury, while the lowest stratum of the rampart-material consists of turf clearly from the line of the ditch, the later heightening of the earthwork on either side of the entrances consists of alternate layers of chalk rubble and turf, forming exactly analogous seams.[4]

At St. Catharine's Hill we have evidence of the same method of constructing the rampart in successive tips, but clearly no facing of turf was laid down on each as in the cases cited: the work was considered stable enough without. That the tipping

1. *Excavations*, III, p. 252.
2. *W.A.M.* XL, pp. 429-30 and 432-3.
3. *W.A.M.* XLIII, pp. 56-7, with fig. II.
4. Toms in *Suss. Arch. Coll.* LXVII, p. 55 ff., embodying Lane-Fox (Pitt-Rivers) in *Arch.* 42, p. 53 ff., and *J.R.A.I.* V, p. 357 ff.

method of construction was thus practised without binding-layers of turf has not apparently been so far attested in chalk country.

On a different subsoil the rampart of the fort at Lydney Park, Gloucestershire, now being excavated by Dr. R. E. M. Wheeler, seems to have consisted originally of two stony tips surmounted by an earthy one, though of course continuous demarcation-lines are here not to be expected owing to the nature of the former; a closer parallel is afforded by the mass of gravel supporting the seats of the audience in the Roman Amphitheatre at Caerleon,[1] where many successive tips could be recognised, demarcated analogously to those composing the St. Catharine's Hill rampart.

It is evident that no covering of turf or soil was laid on the latter, for where such thick seams of dark mould occur in the composition of the rampart where it flanks the entrance (see below, p. 33) there was abundant proof that they represented an occupied surface-level separating work of two different periods. The distinction between these seams and the thin lines demarcating successive tips of the same construction-period will be emphasized in describing the sections there cut in which both appeared together.

To return to the composition of the rampart in Section 1, the first tip, on the edge of the ditch, consisted of brown soil mixed with chalk pebbles, and represents the removal of the surface from the site of the ditch. Next, there is a second tip of cleaner chalky material, a good deal larger, deposited inside and partly overlapping the first: this is the subsoil which lay under the surface of the ditch site and above the hard chalk rock. A third and smaller tip of similar quality lay over these two on the outer slope. The fourth and fifth tips were dumped from the inside: the former consists of the scrapings of the soil inside the rampart already noticed, the fifth of chalky subsoil from the same area. These five tips compose a broad, low mound in which the material is loose chalk, mingled to a greater or less degree with soil, and containing no blocks larger than pebbles. On this foundation the rampart was raised to its full height by a loosely compacted mass of large blocks of clean white chalk, the result of the digging of the ditch deep into the natural rock. This covers all the five former tips, and extends

1. *Archaeologia*, 78, p. 115.

inwards some four feet further, giving the rampart, if modern surface soil be disregarded, a total width at the base of some 40 ft., which may be held to be a reasonable approximation to the original measurement. Finally a slight cavity in the inner slope was filled with a small seventh tip of more surface scrapings from inside the earthwork. A vertical height of 7 ft. above the old turf-line is thus altogether accounted for: above this the modern soil and turf have a thickness of 1 ft. to 1 ft. 6 ins., which in this position must represent disintegration rather than accumulation; if normal spread and the volume of silt in the ditch are also considered, it will appear probable that the original height was at least 8 ft. vertically above the old turf-line.

The Ditch. (Plate IV, 1.)

The level of the present summit of the rampart is 25 ft. 10 ins. above the true bottom of the ditch in this section; the ditch was further cleared of silt for a distance of 10 ft. southwards, and the bottom was found to be rather uneven.

Nothing was found to confirm the theory that in such hill-forts as this a wooden palisade ran along the bottom of the ditch. (See below, p. 67.)

The ditch presents an asymmetrically V-shaped section, with the bottom angle rounded to an irregular curve. Its deepest point in this section lies 11 ft. 9 ins. vertically below the estimated level of the former natural chalk shewn by a broken line in Section 1 (fig. 4, no. 1). Allowing for the effect of erosion as here indicated, the original width of the ditch from lip to lip must have been some 27 ft.

It was filled with silt to a maximum depth of 4 ft. 6 ins. At the bottom was a scanty deposit of chalk pebbles due to the initial 'rapid silting,' and above this a band of brown mould 6 ins. and more thick, representing the first formation of vegetation in the ditch. Chalky silt accounts for the next 3 ft. or so, clean white at the bottom, and more and more mingled with soil towards the top, where it merged imperceptibly into the modern surface soil, which with the turf was well over 1 ft. thick.

There was here no evidence for the cleaning-out of the ditch by the occupants of the site after it had once been made: for though the silt in the ditch was entirely barren of pottery fragments or other remains of the period of occupation, another inference is to be drawn from this. Not only were such remains

PLATE II

1. Face of Rampart and Ditch in Section 1, seen from East.
2. Face of Rampart and Ditch in Section 2, seen from East.

also wholly absent from the make-up of the rampart here, but none were found either in the depression due to the scraping of the surface soil inside the rampart, or in either of two trial excavations made respectively 40 ft. and 90 ft. north of the inner end of the section in slight hollows which looked likely sites for pits, but were not. The lack of remains here is in marked contrast to their abundance in the neighbourhood of Section 2 and of the entrance, and indicates that the portion of the site bounded by this stretch of the earthwork was not intensively occupied, if indeed it was occupied at all. Thus no secondary cleaning-out of the ditch need here be adduced to explain the absence of remains in the silt.

SECTION 2. (Fig. 4, No. 2.)

Section 2 was 8 ft. wide and 126 ft. long. The top of the existing rampart is here 7 ft. 9 ins. above the ground-level at the inner end of the section, and 16 ft. 9 ins. above the modern ground-level in the ditch. The disparity of these figures with those for Section 1 is largely due to the fact that the natural slope of the ground, here roughly to the east, is very appreciably less.

The Rampart. (Plate II, 2.)

The evidence obtained from the cutting through the rampart agrees perfectly with that from Section 1, but is considerably ampler. The old turf-line was found as a band of dark soil, usually rather under 6 ins. thick, running beneath the make-up of the rampart from a point 15 ft. to a point 54 ft. 6 ins. from the inner end of the section. Its absence on either side of these points is as before to be explained by the excavation on the outer side for the ditch, and on the inner by the scraping away of surface soil to furnish additional material for the rampart. The latter was found here too to be composed of seven distinct tips of differentiated material, the nature of the narrow demarcating lines of darker soil being the same as in Section 1. The tips were, however, somewhat differently disposed, as the work had evidently begun here with the scraping of surface soil from inside the site chosen for the Earthwork. The first tip so formed was a small mound under 10 ft. wide at the base, and only 1 ft. 6 ins. high at the crest, which was 24 ft. from the inner end of the section. Against the further side of this,

three more tips were piled, of which the uppermost at least was probably obtained from the surface soil on the site of the ditch. All these first four tips, though plainly marked off from each other, consisted of the same quality of brownish earth mixed with chalk pebbles. The fifth tip, which partly covered the fourth, was of different composition, corresponding to the second and third tips in Section 1, and of greater size, rising to a height at the crest of 5 ft. Its rather loosely-packed chalk, without any admixture of earth, and its position on the outer side of the rampart, shew it to be made of the subsoil excavated for the ditch, while its considerable bulk and the presence in it of many blocks of appreciable size indicate the beginning of the excavation of the chalk rock beneath. But before this can have been carried down to any great depth, further activity on the inside of the rampart produced a sixth tip, which, while of no great height, extended at least from a point 14 ft. from the inner end of the section to half-way up the inner slope of the preceding fifth tip, entirely covering the first four. This consisted of fairly fine clean chalk, and must have been derived not only from the subsoil below the surface earth previously stripped from inside the rampart, but also from an appreciable scraping of the underlying chalk rock, which in fact towards the inner end of the section presents a distinctly hollowed face. The crest of this tip was roughly equal in height to that of the fifth, and the intervening hollow, some 14 ft. across, was last of all filled with a mass of large clean blocks obtained from the deep digging of the ditch in the solid chalk rock, forming the seventh and final tip. The extreme looseness of its packing was even more striking than that of the corresponding tip (the sixth) in Section 1 : the hollows between the irregularly piled inner blocks were often quite large. However, this is no source of weakness, as the state of the rampart's preservation shews and as its builders must well have known, for frost and rain coagulate the outer surface of a chalk bank so built into a hard crust, beneath which such cavities between loose blocks of inner material remain harmless.

Above the height of 6 ft. 6 ins. from the old ground-level to which the crest of this culminating tip can be measured, chalky soil covered by the modern turf lies roughly 1 ft. 6 ins. thick, representing the former chalk crust disintegrated by weather, grass, and worms. The marked flattening of the summit is no doubt partly due to its use as a modern pathway,

and the original height vertically above the old turf-line may thus be reasonably estimated at 8 ft., the same figure as that proposed in considering Section 1. Similarly the width of the rampart at the base established for Section 1, namely 40 ft., holds good here also, if the same margin of error be allowed for the effects of spread and of surface disintegration, and we may conclude that the builders of the earthwork proportioned height to width of base roughly in the ratio of 1 to 5, at least where the natural slope of the ground was no greater than in either of the two sections excavated. At no point in its circuit does the profile of the rampart differ more from this pattern than can be accounted for by the varying steepness of the slope on which it is built, though where this is very sharp, as on the W. and S.W. sides, the rampart lies well back against the face of the slope, and is not made up to any very great vertical height, being in fact in places scarcely perceptible.

No trace was found of a wooden palisade, or other additional defences, though it is conceivable that a light palisade ran along the top of the rampart, with only a shallow bedding of which the disintegration of the upper 1 ft. 6 ins. of the Earthwork has obliterated the traces.[1] The large chalk block marked 'Kerbstone' in Section 2, 17 ft. 6 ins. from its inner end, will be considered when the entrance is dealt with (pp. 37 - 8), as it is with a phase in the history of the entrance defences that it is to be connected.

Finds in and under the Rampart.

Attention must now be directed to the objects found in and under the rampart in this section, which, unlike Section 1, was moderately prolific. The accurate recording on the spot of the position of every find has made it possible to project the discoveries throughout the whole 8 ft. width of the section on to fig. 4, no. 2, so as to illustrate these paragraphs.

The objects will be considered in three classes according to position: firstly, those found under or in the old turf-line beneath the rampart; secondly, those found in the make-up of the rampart, and thirdly, surface finds.

The bulk of this material is not large, and it consists for the most part of small fragments of pottery; nevertheless, it is of some importance as evidence concerning the earthwork and the occupation of the site generally.

1. See the Note on this whole matter below, pp. 67 - 71.

Below the old turf-line in the shallow chalky subsoil were found eleven fragments of the hand-made coarse, gritty pottery characteristic of the early period of the Iron Age: the colour varies from red to black and the clay is of coarse quality freely mixed with pounded flint grit. One fragment had a fairly well smoothed surface, and was of an angular shape suggesting that it had belonged to a carinated bowl (see examples in fig. 12). Of the two fragments illustrated below, one (E. 1, fig. 11) bears a row of tiny punch marks by way of decoration, and the other (E. 4, fig. 11) is part of the irregular and slightly projecting rim of a pot with a very faintly swelling shoulder below it: the rim is decorated on the top with a row of finger-prints.

Some pieces of ox and sheep bone, one of which had been sawn for extracting the marrow, and a little unidentifiable charcoal were also found on this level: all these must have been cast-away rubbish which had worked its way well below the turf before the earthwork was made. With them we may consider the finds from the old turf-line itself, *i.e.* objects lying loose on the surface at the erection of the earthwork. Some 25 pottery fragments, mostly of the same quality, were found: one shews the base-angle of a pot similar to A 5, fig. 10, with a reddish surface which seems to have been roughly finished with a wisp of grass before firing, and four have been illustrated, these are E 2 (fig. 12), shewing the sharp carination of a bowl; E 14 (fig. 12), shewing the neck-and-shoulder angle of a smooth-faced black pot; E 15 (fig. 11), a small piece bearing seven parallel grooves, and lastly E 13 (fig. 14), which is of a different type. The other pieces so far described belong unquestionably to a class of ware which is typical of the Hallstatt period in Britain (whatever may be the precise date of its beginning), and lasts for some time into the period of La Tène. It was called Class A at Hengistbury Head, and is the characteristic coarse ware of the All Cannings Cross Village. E 13, however, has a smooth black surface with a low cordon running across it, and strongly suggests Class B of the Hengistbury Head series, which is assigned to the La Tène I Period, or the 4th or 3rd century B.C. Pieces of bone (ox, sheep or goat, and perhaps red deer) and a little charcoal were also found.

Here, then, we have evidence for an upper limit to the date of the earthwork. (1) The coarse ware of All Cannings Cross type had been in use for a considerable time when it was erected, and fragments had had time to work down well under

the turf. (2) This ware was still in use, or had been in use recently enough for numerous fragments to be still on the surface at the date of erection, and further the same is true of a piece of La Tène I date. The provisional conclusion is that the earthwork was not put up before the 4th century B.C., and anyhow the settlement must have been for some time already in existence.

It will be noted that most of the finds in or under the old turf-line lay beneath the inner half of the rampart, and that only a few fragments of bone came from below its outer slope. This suggests that the limit of occupation in this area before the erection of the rampart was roughly the line subsequently marked by its crest. Such an inference is supported by the distribution of finds in the various tips composing the make-up of the bank. Of the first four tips, the fourth alone, which is the most likely to have come from the surface soil of the ditch site, was sterile, and while the fifth and seventh, consisting of chalk dug from the ditch, naturally produced next to nothing, the tips derived from the soil and subsoil inside the rampart yielded 13 pottery fragments. These were all of the coarse, gritty type, and include E 8 (fig. 11) bearing shallow finger-print decoration, and E 17 (fig. 12), a rather smooth black sherd rounded like a counter. As these were not in the first tips of surface earth, but in the lower part of the sixth tip of subsoil chalk, it may be guessed that they were lying below the turf somewhere near the inner end of this section before the earthwork was put up, and this applies to over half the pottery fragments in these tips, as well as to two pieces of sawn red deer bone found in the sixth tip.

No extravagant conclusion can be based on a section only 8 ft. wide, but it seems acceptable so far to judge that the earthwork was erected at some time in La Tène I period to fortify an existing settlement, here more or less along the line of the edge of its effective occupation-area.

The possibility that the period of the coarse gritty pottery had already ended, and that the earthwork was due to newcomers, perhaps to conquerors, can only be rejected in view of the almost complete absence from the whole site of pottery of the later Iron Age culture of the neighbourhood, and by the presence in the Entrance of the typical coarse gritty ware in stratified groups, proving beyond a doubt its association with the occupation of the defences.

The nature of the surface finds in the section here under review points in the same direction: they consist of two typical small Iron Age potsherds, and for the rest of a modern Chinese coin, a French 25-centime piece, 1923, a piece of mediaeval pottery, and two pieces of Romano-British pottery from the inner foot of the rampart, one the rim of a bulged beaker of early 2nd century A.D. type, and the other a flanged rim of a 2nd - 3rd century type not unlike RB 10, fig. 17. Thus there is nothing subsequent to the occupation characterized by the coarse gritty pottery except what must be later than any effective occupation of the fortifications in the Early Iron Age.

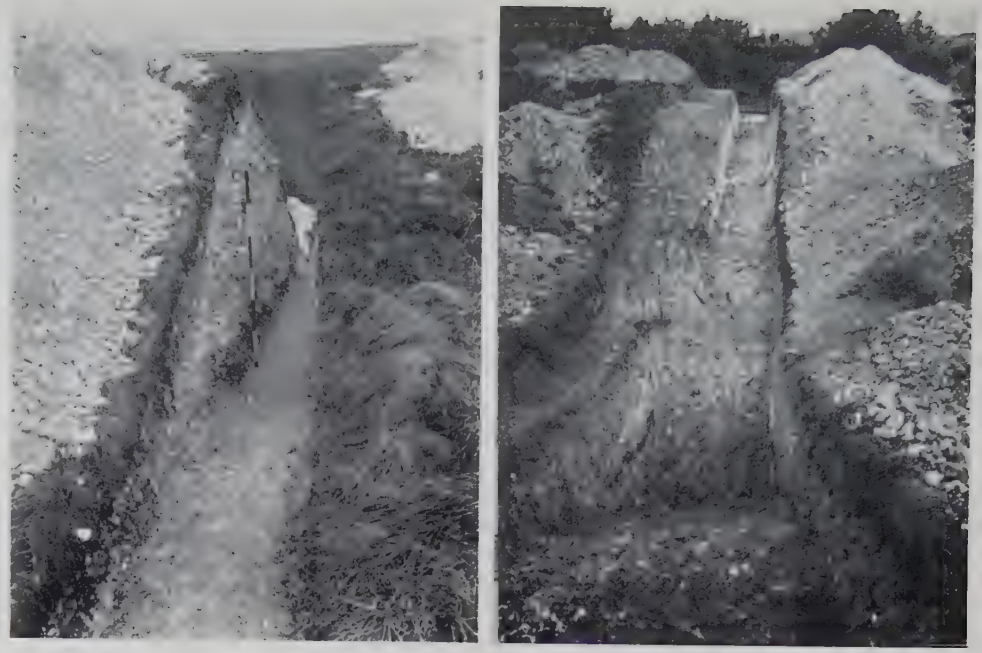
Evidence for dating the lower limit of such occupation will appear later; meanwhile that obtained from this section has provisionally fixed an upper limit, and there is now the ditch to be considered.

The Ditch. (Plate III, 2.)

In this section, the lowest level of the ditch bottom lies 22 ft. 3 ins. below the present top of the rampart. It bore no traces of having held a wooden palisade.

The sloping sides of the ditch are splayed at the top owing to erosion: if allowance be made for this, and the estimated original surface line of the natural chalk be restored, the width of the ditch from lip to lip as designed works out at 27 ft., as in Section 1. The vertical depth of its bottom-level below this presumed former surface-line is here 11 ft. 6 ins. This figure differs by only 3 ins. from the corresponding one for Section 1, but it is evident that there has been a re-cutting of the ditch-bottom at this place. Its floor is practically flat, and the last 2 ft. 6 ins. or so of the sides are cut down at a much steeper angle than the average of the slopes above, their batter being only 20°—25°. The profile thus formed is in marked contrast to the irregularly curved outline seen in Section 1.

We shall find conclusive evidence for the re-cutting of this section of the ditch-bottom, adjoining the entrance, in Section 3 and in the whole excavation of the entrance fortifications, for the strengthening of which the chalk so obtained was plainly used, and it will be strongly suggested that this took place at a date nearer to the end than to the beginning of the occupation. Meanwhile this conclusion is here already suggested by the contents of the silt in the ditch.



1. Rampart in Section 1 seen from West. The old turf-line shews as a dark band by the foot of the measuring pole
2. Ditch and Counterscarp Bank in Section 2, seen from West. The measuring pole stands in the original ditch, the shovel in the secondary ditch.

This silt has been formed chiefly from the rampart, and to a small degree only from the counterscarp bank, as is clearly shewn by the slope of its bedding. Three distinct strata can be observed; the lowest (1), composed of clean chalk rubble, represents the 'rapid silting' from the upper slopes immediately after the re-cutting (when the ditch must have been completely cleaned out), and prior to the first appearance of vegetation. It contained a few ox-bone fragments and two small sherds of coarse pottery. Above this was a band of brown mould (2), some 2 ft. thick, containing near its lower limit a single small potsherd, the jawbone of a pig, and a little fragmentary bone. This represents vegetation; it was covered by another layer of cleaner chalk silt, but for a few inches in the middle there was a fair proportion of chalky silt in it (presumably derived from the lip of the ditch), in and above which no finds were made. Over this a third deposit of more recent white chalk silt (3), increasingly earthy towards the top, filled the ditch almost to the modern surface-level. At a comparatively modern date, when the surface of the ditch was at its lowest point only 1 ft. below what it is to-day, a secondary ditch was cut in it, with a centre-line 5 ft. nearer the counterscarp bank than the centre of the original ditch bottom. It is almost 4 ft. wide at the top, and was cut down to a depth of 4 ft. through the silt already existing into the natural chalk rock, its section being of V-shape almost perfect but for a flat bottom some 9 ins. broad. The course of this ditch northward and southward of this section will be described below (pp. 230-1); all that concerns the present context is that it is of modern date, and has caused disturbance in the silt previously deposited. A small portion of the third stratum of this remained between the side of the secondary ditch and the outer slope of the original ditch, in which was found a piece of the everted plain rim of an Iron Age pot (E 52, fig. 12), but the whole of this stratum contained, as well as a few other sherds of similar ware, a certain amount of later material, mostly in the upper part of it. This includes a Romano-British flanged rim of the common 2nd - 3rd century type resembling RB 10, fig. 17, and a number of modern glazed pot and tile fragments and bones, especially round the area of disturbance caused by the secondary ditch. The latter seems to have been deliberately refilled with the material that had been dug from it, moderately clean loose chalk, containing a little modern rubbish and two Iron Age potsherds. Its date

must be mediaeval or later: it will be further discussed below with the other minor earthworks.

Modern turf and soil, 1 ft. in average thickness and containing a little rubbish, complete the filling of the ditch, which has thus risen to a minimum height of 5 ft. 6 ins. above the true bottom: the effect of its bedding and of the intrusion of the secondary ditch has been that the lowest point of the present surface is rather nearer the counterscarp bank than that of the true ditch bottom.

The evidence that can be gleaned from the finds in the ditch is not much; but the paucity of Iron Age material there points to a date for the re-cutting fairly near the end of the occupation, a conclusion which agrees with the evidence to be considered hereafter from Section 3 and from the entrance, as has been already indicated. The fact that the Romano-British pot-rim was found as high in the silt as 3 ft. 6 ins. from the bottom may suggest a fairly long interval between the period of effective Iron Age occupation and the 2nd century A.D.; however, such evidence from a single fragment can in these circumstances hardly be pressed, though this is in fact the conclusion which will be reached on more adequate grounds.

The Counterscarp Bank. (Plate III, 2.)

The counterscarp bank in this section presents some curious features; it consists of two low mounds with an intervening hollow. Beyond a point of 60 ft. south of this section the bank is single; the depression separating it into two members begins to appear at about that point; in the section itself the distance between the crests of the two mounds has increased to 11 ft. 6 ins., and further northward, as will be seen later (see below, p. 28) it increases still more, till the entrance is reached. The point to be noticed here is that this central depression is reproduced below the surface of the bank in the face of the natural chalk rock, in which this section disclosed a hollow some 12 ft. wide and 1 ft. deep in the centre. It seems permissible to believe that this hollow is likely to be partly natural, and that it was increased to its present dimensions by scraping to form a shallow tapering trench between the two limbs into which it was resolved to divide the counterscarp bank for 100 ft. or so on either side of the entrance. For indeed the bank is similarly divided on the north side of the entrance, though complete symmetry cannot be proved owing to the modern Sewage Farm

hedge. The material so obtained would be used to supplement the allowance spared for the counterscarp bank from the ditch excavation, and at the same time the effectiveness of the obstacle flanking the entrance created by a double counterscarp bank would be increased by a trench, shallow though it were, between its two members. It must, however, be admitted that even so the obstacle cannot have been very formidable without additional defences of wood, as the height of the twin mounds is so low. They were found in this section to be 1 ft. 3 ins. and 1 ft. 7 ins. high respectively, though silting on both sides and into the central depression must be allowed for, the silt in the middle of the latter being 1 ft. 10 ins. deep. One foot down at this point were found two small sherds of Iron Age coarse pottery, and in the inner slope of the eastern limb of the bank three more: fragments of bone were associated with both these finds. The material of the counterscarp bank is throughout rather loose chalk rubble, with some little admixture of earth: its slope is everywhere gentle, and there must have been a certain amount of spread, especially on the outside, where the natural level begins to slope rather more steeply.

Except for a little modern rubbish in the surface soil of the central depression, there were no other discoveries in or outside the counterscarp bank, traces of any additional defences such as wooden palisading being wholly absent, and thus the evidence obtained from the rampart and ditch remains unaffected by the results, such as they are, of this portion of the section.

SECTION 3. (Fig. 4.) In the Ditch.

Section 3 was cut in 1927 in the ditch only. The first cutting, 25 ft. long and 4 ft. wide, which crossed the ditch at right angles 34 ft. south of the centre of the Entrance causeway, was afterwards enlarged by the complete clearance of the ditch for a distance of 22 ft. up to its termination against this causeway. The line of the ditch has here a distinct inward curve towards the Entrance. The original cutting will be described first.

The contour of the ditch is here distinctly more concave than in Section 2. The same re-cutting as was there noticed was apparent, but its outline was wider, and the sides more splayed, being 3 ft. 3 ins. apart across the flat bottom, and 7 ft. 6 ins. between the angles formed with the face of the ditch as originally cut.

The secondary ditch found in Section 2 was again present, but of this too the sides were more splayed than they were there, the angle being here some 50.° The bottom was 9 ins. wide, and none of the silt of the original ditch had been left against its outer slope.

The filling of the secondary ditch, in which a little modern rubbish only was found, was similar to that in Section 2, and its depth in the centre was 3 ft. 9 ins. vertically below the present surface. Where it had not disturbed the silt of the original ditch, the latter was found to be bedded in two strata only; there was no appreciable 'rapid silting,' and brown mould (1), with some admixture of cleaner chalk silt, filled the ditch to a vertical height of just over 2 ft. above the centre of the bottom, and extended 7 ft. 6 ins. up the inner slope, its extent up the outer slope being now interrupted by the secondary ditch. Considering the size of this stratum, its yield of remains was surprisingly small. A single small Iron Age potsherd and two fragments of ox and pig bone were all that was found, and this paucity is the more remarkable at so short a distance from the Entrance causeway, for a larger amount of rubbish might be expected in its near neighbourhood.

This provides a negative argument for a comparatively short lapse of time only between the re-cutting of the ditch, at which all rubbish already lying there must have been removed, and the end of the occupation.

Above this brownish deposit, which corresponds to stratum 2 in Section 2, lay a thick stratum (2) of whitish chalk silt, earthier towards the top, corresponding to the fifth in that section. It contained one small Iron Age sherd, a little fragment of iron, some unidentifiable charcoal here and there, and a few pieces of bone (sheep or goat): in addition to this scanty yield, a Roman coin was found in it at a depth of 2 ft. 6 ins., 4 ft. 9 ins. inwards from the centre-line of the ditch. It was a badly worn and clipped bronze coin of Carausius (A.D. 286-293) of the *Pax Aug.* type (see below, p. 139), and if, as is likely, it found its way into the ditch during the 4th century A.D., it shows what a large amount of silt had then already formed. In fact, it had probably sunk below the contemporary surface-level, as coins will. The modern surface soil contained four Iron Age, two Romano-British, and about half a dozen mediaeval pottery fragments; its average thickness was 1 ft. 6 ins., and the total depth of silt vertically above the centre of the ditch bottom was just over 5 ft.

1. Ditch in Section 1, seen from West.
2. End of Ditch in Section 3, seen from N.W. The Causeway flank forming the original square end is seen in the foreground: the measuring pole stands in the bottom as re cut with rounded end. The secondary ditch is seen beyond.

The End of the Ditch and the Entrance Causeway.

(Plate IV, 2; plan and sections in fig. 5.)

For the extension of the excavation of this section so as to clear the ditch right up to the Entrance causeway, an area roughly semi-circular was cleared of turf, but the termination of the ditch was found not to have this form. At a distance of 10 ft. north of the southern face of the section it ended off almost square, with a sharp turn of roughly a right angle between its inner lip at the foot of the rampart and the edge of the causeway which formed its end. It will be noticed that the secondary ditch does not stop here, but runs straight on across the causeway, more or less following its present contour; but for this modern interruption the causeway is a solid mass of untouched natural chalk rock, which must originally have been nearly level across the top, but now slopes slightly towards the edges owing to denudation into the ditch on either side.

Its flank, forming the termination of the ditch, is cut at an average angle of 50°, but the bottom of this slant is not quite parallel with the top, and the angle decreases slightly towards the east, where the cutting of the secondary ditch has destroyed the original outer corner.

The re-cutting of the first bottom is clearly displayed in the shape of its end. It has already been noticed that its sides are distinguished from the original cut of the ditch by their much sharper slope, and the photograph (Plate IV, 2) clearly shews how they curve to meet each other at the foot of the straight causeway flank, forming a roughly semi-circular end to the re-cut bottom which is in marked contrast to the original square termination of the ditch above it.

The lower stratum of earthy silt in the end of the ditch was disappointingly barren, and though the chalky silt above it contained 21 fragments of Iron Age pottery, they can be of no significance in view of the Roman coin and pottery and other later material found in this stratum in the original cut of this section and in Section 2. Beyond a little charcoal and some pieces of bone (ox, horse, pig, sheep or goat, and dog), there were no other discoveries here, and such conclusions as have already been provisionally reached from the consideration of the ditch silt can accordingly remain undisturbed.

FURTHER EXCAVATIONS IN THE COUNTERSCARP BANK

In 1928 the original line of Section 3 was prolonged across the Counterscarp bank for a distance of 16 ft., by a cutting 2 ft. wide. The object of this piece of excavation was further to investigate the curious splitting of the counterscarp bank into two members already observed in Section 2 : it was thought that a section across it nearer the Entrance-way, where the intervening hollow was wider, might throw some light on the purpose of the division, and would in particular test the theory of Dr. Williams Freeman that these hollows were 'pear-shaped guard-houses,' and were to be classified with the more pronounced outworks visible in a corresponding position, for instance, outside the fortress-entrance at Beacon Hill, Burghclere.[1]

The result was disappointing. The crests of the two limbs of the bank were found to be 18 ft. 6 ins. apart, but the hollow, of the same depth as observed in Section 2, was entirely sterile, as indeed was the whole section. A similar fruitless result attended the digging of an L-shaped excavation at the termination of the inner member of the bank on the south Entrance causeway.

As no remains of any sort were met with in either of these excavations, and as there was no trace of an occupation 'floor' in the hollow, the use of the term 'guard-house' must be regarded as unjustifiable, and although the duplication of the counterscarp bank cannot be anything but defensive in intention, the absence of traces of any such additional defences as would increase the effectiveness of these curiously low and insignificant banks is remarkable.

The surface soil is so thin that any timber palisading that might have stood here must have had a strangely shallow bedding, if all traces of it can have been obliterated by surface disintegration. (See further below, pp. 70 - 1.)

No excavations were undertaken on the north side of the Entrance-way : the field of operations is there more restricted by the near neighbourhood of the Sewage Farm hedge, and the surface indications gave no promise of any features materially different from those already recorded on the south side.

Assuming that its northern and southern flanks are similar, the width of the causeway may be given as some 40 ft.

1. *Field Archæology*, pp. 21-2, 252 : *cf.* p. 356. See further below, pp. 82, 84.

THE ENTRANCE

(General views, Plate V ; photographs of detail, Plates VI - VII ; plan, fig. 5, with index numbers to Sections 4-10, figs. 4 and 6.)

A chalky band, as has already been said, is visible running W. S.W. across the Sewage Farm, and it can hardly be doubted that this represents an old way leading up the hill to the Entrance, connected with the prehistoric ridgeway which runs across Hampshire to the Sussex Downs, as partly shown in the map, fig. 3 (see also the note to this map, p. 5). Hollow tracks which certainly represent this ridgeway are visible not far east of the hill on the north of the modern Morestead road, and from near this point the way up to the Entrance may be presumed to have led westward across ground since cut by Roman and later roadways, and over the modern Sewage Farm area which still bears its traces. It thus passed between the splayed double ends of the counterscarp bank, where the width is some 25 ft., and the causeway between the ends of the ditch brings it up to a passage, originally 25 ft. across at its narrowest, formed by a gap in the rampart, the ends of which are inturned so as to flank the roadway for a distance of some 60 ft. on the south and rather under 50 ft. on the north.

This passage between the inturned ends of the rampart is appreciably askew with the causeway over the gap in the ditch, and as will be seen below, this may very possibly be intentional.

The Entrance so formed belongs to a type widely recognized among early Iron Age fortresses, general consideration of which will be found below (pp. 72 - 84), but excavation here revealed features hitherto without parallel in any structure of the kind. The ends of the rampart were revetted with timber, inside which they were faced with clay, and these revetments turned at right angles about half-way along the passage, so as to form a pronounced bay on either side of it. Further, the timber-work had been supported, evidently at some later period of the occupation, with walls of large chalk lumps, and extensive works had been at one time carried out with a view to blocking the southern half of the roadway. The surface of the latter was found to consist of the ordinary chalk subsoil of the hill, trodden down to a hard crust a good 6 ins. thick, below which the natural chalk rock lay at a depth of not more than another 6 ins. This crust was over a large area blackened by fire, and

the traces of burning all over the entrance were so pronounced as to make it clear that the whole complex of defences had perished in a violent conflagration, presumably at the hands of an enemy who put an effective end to the whole occupation.

THE PITS PROBABLY OR CERTAINLY EARLIER THAN THE ENTRANCE

(Plans and sections on fig. 10.)

Before proceeding to describe the remains in detail, there is evidence to be reviewed, agreeing with that already obtained from the sections through the rampart, that no defences at all existed in the earlier period of the occupation. In their absence, it is obvious that there would be no delimitation of the way of approach, and it can hardly be surprising that three dwelling or storage pits were found in the entrance area which require to be dated to the period of unfortified habitation, when they would have afforded no obstacle to passage.

They were lettered respectively Pits V, M, and T.

Pit V.

Pit V, which lies at the middle of the northern flank of the Entrance, had been filled in to allow of the construction of defences over it. It will therefore be described in detail below (pp. 41 - 4), but the fact of its early date may here be noted as thus established.

Pit M.

Pit M was in plan an irregular quadrilateral with rounded angles : at the top, its greatest length was 6 ft. 3 ins. and its breadth 4 ft. Its bottom was flat and just 5 ft. below the modern surface-level, and its sides were slightly splayed from the vertical. No evidence concerning its purpose could be secured, for it had been emptied of any remains it may once have contained, and entirely filled with clean, white chalk : its sides were not appreciably eroded at the top, perhaps indicating that it was not in use for long. Its similarity in type to the known Early Iron Age pits elsewhere on the hill leaves no reasonable doubt that it is of that period, but it is clearly independent of the fortifications, for had it been intended to break the rush of a hostile storming party trying to force the

entrance it would either be larger or else placed at the narrowest part of the passage. Not only its barrenness, but its remoteness from the arrangements actually made for guarding the Entrance, make it unlikely to have been a guard-room, or rather a shelter for the guardian in bad weather (a doubtful suggestion made concerning the pit in the entrance at Casterley Camp).[1] In fact, it is situated nearly in the middle of the roadway between the tails of the rampart, where it could have been nothing but a hindrance had it lain open after the fortifications had delimited the way of approach, and considering the obviously artificial nature of its homogeneous filling it must be presumed to have been earlier than the defences and filled in at the time of their erection.

Pit T. (Plate VIII, 2.)

Pit T, situated 7 ft. north of Pit M, was peculiar in being double. Its southern portion, roughly oval in shape, 4 ft. long by 3 ft. broad and with a level bottom 6 ft. below the modern turf, was connected over a flat intervening shelf, 2 ft. wide and 1 ft. 3 ins. across, at a level 1 ft. 6 ins. higher, with the northern portion, which was a smaller oval 3 ft. 9 ins. long by 2 ft. 6 ins. broad, in depth 5 ft. 6 ins. below the modern mean turf-level and 6 ins. below the shelf. The whole pit is thus of hour-glass form, of which other examples, to be presumed contemporary, have been found at the All Cannings Cross[2] and Fifield Bavant Villages.[3]

Its sides are generally almost vertical, though slightly recessed at the north end, and had not been eroded at the top. Like Pit M, it was barren of remains, and had been similarly filled in. It is actually further from the defended neck of the Entrance than Pit M, and is as unlikely to have been concerned with the guarding arrangements. However, as it is adjacent to the northern tail of the rampart, it cannot definitely be said to be necessarily independent of the fortifications altogether, but at least it must have been filled before their final ruin, as traces of fire were absent from the chalk filling, which only contained four small potsherds, and a few ox, pig, and sheep or goat bones, though some occurred above it under the modern turf.

1. *W.A.M.*, XXXVIII, p. 69, and pt. XII; see below, p. 82 and fig. 8.

2. Pits 57-8; but without intervening shelf. *All Cannings Cross*, p. 73 and plate 5, nos. 6-7.

3. Pits 25-6, 36-7, 46-7 (of which 46, the shallower, was a grain-store), 74-5, 83-4, 86-7; only the last two pairs with intervening shelf. *W.A.M.*, XLII, pp. 469-71 and plates II-III.

On the whole it is reasonable to believe that all these three pits existed before the defences and were filled when they were constructed; this is unquestionably true for Pit V, highly probable for Pit M, and little less so for Pit T.

THE INTURNED ENDS OF THE RAMPART

The composition of the inturned ends of the rampart flanking the Entrance will now be described. While, as has been seen, the rampart at the points where Sections 1 and 2 were cut was evidently all erected at one time, yet it was found that on either side of the Entrance it consisted of a lower and an upper

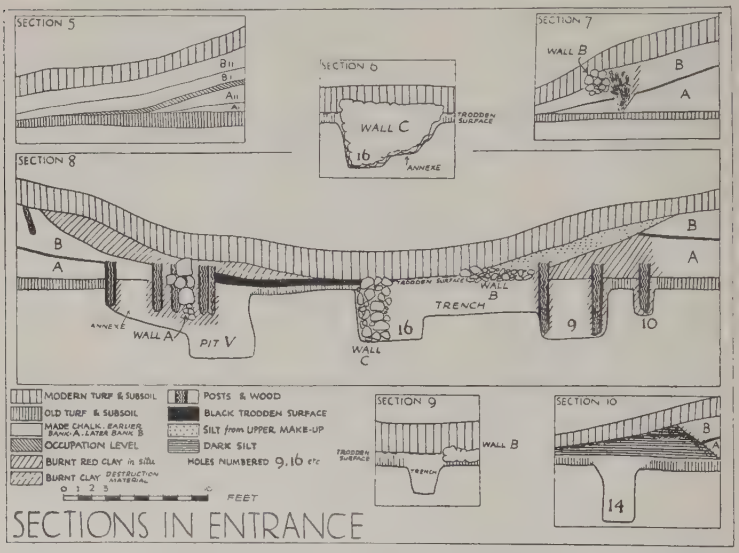


FIG. 6. SECTIONS 5–10. For their positions see fig. 5, p. 29.

section marked A and B in Sections 4, 5, and 8 (figs. 4 and 6), belonging to two different periods. The addition of the latter increased the height, which rises nearly to 10 ft. opposite the narrowest part of the Entrance passage, the upward slope of the crest beginning on the south almost from the northern edge of Section 2, and at a corresponding distance from the centre of the roadway (*i.e.* some 60 ft.) on the north. But the rampart-ends as originally constructed sloped downwards as they neared the Entrance, though the southern one was the

higher of the two : on their inward turn they were only 1 ft. 9 ins. high on the north and 2 ft. 3 ins. on the south where Section 4 was cut, and only 6 to 8 ft. beyond this section they ended on both sides flush with the ground. The surface of these early banks yielded considerable evidence of occupation, especially on the north where in Section 4 it was marked by a burnt stratum as much as 6 ins. thick, containing ash-wood charcoal, and on both sides the layer which it formed presented an unmistakable contrast to the tenuous lines of demarcation between the successive tips of material of which the single-period rampart in Sections 1 and 2 was found to be composed. This contrast is strikingly shown in Section 5, cut in the north side of the northern rampart-end, where the thick band of dark soil representing the original surface of the earthwork slopes from the old ground-level to a height of 2 ft. 3 ins., and below it the make-up of the first bank is seen to consist of two tips of material (A i and ii), separated similarly to those found to demarcate the various tips already described in Sections 1 and 2. The lower tip is of brownish earthy material evidently as before derived from surface soil, while the upper one, clearly upcast from the ditch, consists of clean white chalk. The make-up of the later period lying above the surface-stratum of the original bank is similarly subdivided into two tips, as will be seen in due course.

Section 4 shews the early bank on the north side composed of the same two tips (also marked A. i and ii), but on the south it revealed a different procedure. The white chalk upcast from the ditch was deposited first (marked A. i), and the earthier material obtained by surface scraping was employed to widen the bank so formed by being piled against it on the inside (marked A ii). We need not expect the method of construction to have been everywhere uniform, as the differences of tipping in Sections 1 and 2 warn us.

Of the pottery here found nearly all was featureless, but of the eleven fragments found in the unsoiled chalk upcast and therefore to be regarded as not later than the date of its deposit, two are noticeable. One had an irregular, rather projecting, rim with broad finger-markings, and the other (E 28, fig. 12) was very thin and noticeably smooth, with a shallow groove just below a rather rounded rim. Such an 'incipient bead-rim' is not characteristic of the earlier types of this class of ware, and this find supports the fairly late date in the occupation which has already been indicated for the erection of the earth-

work. Fragments of bone (ox and sheep or goat) were also found.

The surface-stratum of this original bank was easily recognisable in all the sections cut into the rampart in the Entrance area. On the north, as has been said, it appeared in Section 4 at least as a burnt layer, which was covered by the unburnt chalk of the later addition to the rampart, and therefore can be dissociated from the fire which finally ruined the works: this layer yielded, besides bone fragments (horse), numerous sherds of the typical coarse pottery, of no particular character, while on the south, where it consisted of dark but unburnt soil, two of the eleven pieces found satisfactorily stratified have been illustrated: E 67, a plain black rim-fragment of a gritty and rather thick pot, and E 77, part of the side of a carinated bowl of All Cannings Cross type. (See fig. 12.) Some pig and dog bones also occurred.

These finds are important as shewing that the same kind of pottery was in use after the first construction of the rampart as has been already seen to have been current previously, though early examples more usually have a flat rim than a rounded one like E. 67, which approximates rather to the 'incipient bead-rim' type noticed as exemplified by E. 28. This find tends to strengthen the argument for the construction of the earthwork at a comparatively late date, while a *terminus ante quem* is provided by the pottery found on the Area scraped for rampart-material immediately S. of the Entrance, which is mostly of early La Tène II type, and belongs to the late period of the settlement. (See below, p. 92.)

The Revetment and the Clay Facing.

This original rampart was supported, where its incurved ends flanked the entrances, with a stout timber revetment, which may be guessed to have been carried up to form a fence or palisade edging the earthwork, considering that this was here, as has been seen, of no very great height. (See further below, pp. 60 and 69.)

It consisted of upright posts standing at irregular intervals, behind which horizontal beams held back the make-up of the bank, forming vertical walls on either side of the roadway. All its remains were heavily charred by the final fire, but fortunately were extensive enough to enable its plan to be almost completely restored. The timber employed seems to have

been both oak and ash (see Report on the Charcoal below, p. 137); as far as could be judged from what was left of them, the posts had measured from 9 ins. to 1 ft. across, and seemed to retain their natural rounded section. The holes in which they stood were, except in special cases, of roughly circular form, seldom less than 2 ft. and sometimes nearly 3 ft. in diameter. Such an excess of the breadth of the hole over that of the post seems to be fairly regular in prehistoric timber-work, a narrower hole of sufficient depth being difficult to dig, at least in hard chalk rock. Accordingly, each post was surrounded by a solid packing of chalk pebbles and earth mixed with clay. The holes varied somewhat in depth, for, in order to bring the tops of the posts to a uniform height, it must have seemed less trouble to dig to different levels, according to the lengths as first cut, than to reduce all the timbers to the same size. The average depth below the old surface level was 3 ft. 6 ins. to 4 ft., the maximum being 5 ft. and the minimum 2 ft. A shallow bank of chalk was found in Section 7, near the outer end of the southern revetment, to have been piled as an additional support against the foot of the timber-work.

Of the horizontal beams, the lowest course was found intermittently *in situ* (*e.g.* on the north side between Holes 7 and 8, where they were of ash wood), and the discovery of substantial portions of timbers which had fallen from above will be recorded in due course.

Where thus revetted, the chalk and earthy material of the rampart was faced with clay. For the lower or original banks it appeared to have been fairly thin, and on the south side it was only barely traceable at the outer and absent altogether towards the inner end of the revetments. The facing of the later super-imposed material was generally much thicker, as will be seen, but for the earlier work no exact measurements could be taken, chiefly because the fire that had ruined the timber-work had everywhere reduced this clay to a bright brick-red powder which was found most inconveniently loose. It is the same clay as has been mentioned as present in the packing of the post-holes, where it appeared in a like powdery condition.

This facing seems to be unparalleled elsewhere, and must have been adopted as a waterproofing device to prevent the rotting of the timbers by drainage from the banks and into the post-holes.

A cap of Clay-with-Flints covers much of the chalk upland of Eastern Hants, and 'pipes' of such clay are often found in natural chalk: in fact, one of these was discovered close to the west end of the Chapel here (p. 230), so the required material was to be found near at hand.

The southern revetment began 20 ft. from the edge of the ditch and ran as far as the tail of the bank some 53 ft. beyond: the northern was much shorter. Beginning about 35 ft. from the edge of the ditch, it apparently only extended to a point 57 ft. from it, but there is some doubt about its inner termination.

A round hole (Hole 1), 2 ft. 3 ins. across and 3 ft. 6 ins. deep, resembling a post-hole, was found under the north side of the northern rampart-end, some 6 ft. north-east of Pit T, but as it was not only wholly filled with clean chalk, but also entirely covered by the make-up of the earthwork without any trace of a post, it is not possible to connect it with the revetment. Its purpose is uncertain, but it may have had something to do with Pit T.

The case is not quite the same with Hole 2, which was discovered just to the north-west of it. This hole was a little smaller, and contained, in the usual packing of chalk pebbles and of clay found burnt to powder, the charred stump of a post, which could be traced up through both the lower and the upper layers of the rampart material, and was thus presumably in existence throughout the occupation. It is natural to try to connect it with the revetment, but it is on the wrong side of the bank, and careful search failed to reveal any traces of timber-work round the intervening curve of the earthwork or along its northern foot, where the final fire had left no heavy deposit of charcoal as might have been expected. Consequently, though this post gives cause for presuming that there was some wooden structure on this side of the Entrance in addition to the comparatively short stretch of revetment which was found flanking the roadway, no more definite conclusion can be reached, and the matter must be left in doubt.

The Heightening of the Rampart.

The next feature of the defences to be considered is the heightening of the rampart, the extent of which on either side of the Entrance has already been indicated. On the north, the section (5) above noticed as showing two distinct tips of material composing the original bank (A. i and ii), testified to a similar

1 View across Entrance from North, shewing in foreground Wall A and Pit V (in which measuring pole stands), and Walls C and B and trench beyond.

2. View across Entrance from South, shewing trench and Hole 16 with Wall C, and further, Pit V (containing measuring pole), and Wall A.

demarcation in the new addition between a lower tip, in which some little brownish soil was mingled with the chalk (B. i), and an upper one of cleaner chalk (B. ii) containing fairly large lumps.

Elsewhere, the new addition seems to consist of a homogeneous deposit of fairly clean chalk.

The re-cutting of the ditch, which has been so unmistakably attested, provides this large mass of added rampart material with an origin which may be regarded as certain. The correlation is as clear as between the initial digging of the ditch and erection of the rampart; in fact, we may safely pronounce the deepening of the ditch and the heightening of the earthwork on either side of the Entrance to have been complementary parts of a single scheme of reconditioning the defences on the north-east, the only really vulnerable side of the fortress. It is true that the depth of the new cutting in the ditch-bottom was not great, but the excavations did not establish how far along from the entrance in either direction it was carried, and as the natural slope on the hill might be considered dangerously gentle for some 70 yards on the north and 200 on the south of the Entrance, there may have been re-cutting over most if not all of this distance. We only know that there was none in Section 1, but there the slope has become a good deal steeper, and if, say, 250 yards were re-cut ample material would be provided for the heightening, which, as we have seen, did not extend more than 60 ft. each side of the centre of the Entrance roadway.

The new material was carefully disposed along the in-turned ends of the rampart in a curve which followed that of the original earthwork, but ended flush with the ground 5 to 6 ft. further inwards from the ditch.

The Kerbstones. (Plate VI, 1; Sections 2 and 4, fig. 4.)

It has already been noticed that the increase in height on the south begins from the north side of Section 2. Now in digging this section a large irregular block of chalk was found embedded in the original inner foot of the rampart. It was suspected that the earthwork might be continuously edged with such blocks, and search was accordingly made along it in both directions. On the south, no satisfactory discovery was made, but it was in the northern face of the section that the block was found, and on this side when the foot of the rampart was followed along four more such blocks were found. The whole row,

over 6 ft. long, of five contiguous blocks lay firmly bedded in the original rampart-material, in a curve corresponding to the inward bend which it makes in order to flank the Entrance. 3 ft. 9 ins. further along the same curve two more were found, lying right across Section 4, and it was seen that the line of all seven blocks was the boundary of the new white chalk deposit forming the heightening of the rampart, as Section 4 clearly shews. No further blocks were found which could be brought into satisfactory relation with these, but as they were embedded in the original rampart-material, and as their line bounded the curving edge of the later addition to it, it is natural to regard them as kerbstones forming a setting-out line for the piling of the new material, which would also serve to counteract spread. If this view be right, no doubt the line originally ran much further, and was repeated on the north side, but the displacement or disintegration of the blocks would be only natural, and the discovery of seven so significantly placed must be considered fortunate. The blocks are to be considered as a kerb-line only, and except in strict connexion with the timber-work flanking the Entrance, no part of the excavations yielded traces of anything like a retaining-wall to the rampart. In stony country, for instance in Wales,[1] this device seems to have been regularly employed, while its multiplication produced the *murus duplex* probably mentioned by Caesar[2] in Gaul, and exemplified on many sites;[3] but where the material was chalk there is nothing to attest any attempt at such construction, except that in regions where sarsen stone was available it may have been so used—evidence for this at Uffington Castle and Alfred's Castle on the Berkshire Downs has been observed by Mr. O. G. S. Crawford and Mr. Stuart Pigott.[4]

The Material of the Heightening of the Rampart and Finds in it.

This camp has already been noticed as having yielded no traces of a stockade crowning the rampart; in all the cuttings through the St. Catharine's Hill earthwork only one discovery was made which might indicate a similar feature. This was at

1. *e.g.* at Pen Dinas near Hengwm, *Arch. Cambr.*, Jan.—April, 1920, p. 116 ff; and Treir Ceiri and Dinas Penmaenmawr, *Arch. Cambr.*, Dec. 1926, pp. 221-282 especially fig. 20, p. 257.

2. *B.G.* II, 29, 3.

3. Déchelette, *Manuel* III, p. 191: Worlebury (Somerset) is a good British example.

4. *Ant. Journ.* II, no. i, p. 54: *Antiquity*, vol. III, no. 11, p. 352. See further below, p. 68).

1. Junction of Sections 2 and 4, shewing line of Kerbstones, seen from N.W.
2. Section 10 in S. Bay of Entrance seen from South: the measuring pole stands in Hole 14, to the right of which the floor-line of the bay shews as a white streak, with the dark silt deposit above.

the northern end of Section 8, where the remains of the stump of a stake some 5 ins. thick and 2 ft. long were found penetrating the additional rampart-material at a slant to a depth of nearly 4 ft. below the present ground-surface. The stake was quite isolated, but a thorough search was made for further evidence by means of a trench 4 ft. deep, 6 ft. wide, and 25 ft. long running northwards from the end of Section 8 along the crest of the rampart. Absolutely no trace of a stockade was found, and it must be concluded that if there was any such thing, it can have been bedded no deeper than the layer of surface disintegration which could alone account for the disappearance of its traces, and the isolated stake in Section 8, whatever it was, cannot have formed part of it. (See further below, pp. 67-71).

Where the new deposit of rampart-material abutted on the timber revetment, a facing of clay was found like that employed for the original works, but on the whole it was very much thicker, especially at the inner end of the north side, where it ran back as far as the crest of the bank, and incidentally contained the radius of an ox. However, like the facing of the primary rampart, it was narrower at the outer end on both sides, being there represented by traces only a few inches thick, while at the inner end it was again entirely absent on the south side.

The powder to which the final fire had reduced this clay was so loose that it was found for the most part mixed with destruction-rubbish, silting, and intrusive material generally; consequently such finds of pottery, etc., as were made in it cannot safely be regarded as stratified. However, a fair amount of pottery, as well as bones of horse, sheep or goat, and red deer, came from the clean chalk of the new make-up of the rampart, which must be at latest of the period of its deposit, but may be largely earlier, as much of it must have been lying as rubbish in the ditch when the re-cutting of its bottom was undertaken to provide the material required for heightening the rampart. On the north side the finds included E 118 (fig. 12), a fairly smooth piece of an angular bowl, as well as another piece with similar carination; there were also three pieces of coarse pots with sharp shoulder angles decorated with finger-nail ornament, of which two are illustrated, E 119 and E 121 (fig. 11). The finds were rather more frequent on the south side, but only two pieces were of any character: one, E 24 (fig. 11), has an ornament of parallel grooves, and the other, which closely resembles E 136 (fig. 12), shewing a more

than faintly beaded rim, which finds parallels in the examples found in Pit R, the latest on the whole site. This 'incipient bead-rim,' more pronounced than E 28 noticed above from the original rampart-material, seems to be a late type, and this is in conformity with the conclusions already formed concerning the chronology of the earthwork. The presence here of the angular bowl and the sharp-shouldered finger-printed pot, which are typologically earlier, need not surprise when we remember that the whole deposit comes from the ditch and would certainly contain earlier rubbish.

It is a common-place of archaeology that the objects must of necessity be very rarely found in the make-up of an earthwork, unless previously present in its material before erection. This rule is well borne out by all the cuttings in this rampart, and here there is a further important point to be noticed. The considerable amount of pottery and bones found in the addition to the rampart may be safely taken as coming nearly all from the ditch, where it represents the accumulation of rubbish between its first digging and its re-cutting. Its bulk is in marked contrast to the scanty finds made in the ditch itself, which represent the accumulation between the re-cutting and the end of the occupation. The inference is that the reconditioning took place considerably nearer the end than the beginning of the occupation of the defences.

THE WALLS

The ends of the rampart, thus heightened, were greatly increased in weight, and the timber revetment was evidently considered inadequate alone to stand the strain. It was therefore reinforced by walls, consisting of large irregular blocks of chalk, with the interstices fitted with smaller pebbles and earth.

Wall A.

Of the northern wall (Wall A) not quite all was found *in situ*, about half of it being composed of a single row of blocks only, which stood to an average height of 1 ft. 6 ins., but the numerous tumbled lumps which lay near it shew it to have been originally higher, and the breadth of 2 ft. recorded in Section 8 was probably uniform along its whole length. It very possibly extended as far as the outer terminal post-hole (Hole 5) of the revetment which it was designed to support, but for 3 ft. inwards from this post-hole the final destruction had evidently caused

a general collapse, and there had been a big fall of blocks, timber and clay from the rampart-facing out into the roadway, where two pieces evidently of the horizontal beams (oak) were found charred but unbroken, respectively 1 ft. 8 ins. and 1 ft. 9 ins. long, lying among the débris of the remainder.

Wall B. (Plate VII, 1.)

The southern wall (Wall B) had suffered much less. There was a number of tumbled blocks round its outer end, one having fallen in upon the ruined woodwork, but the bulk of it was undisturbed as near as 1 ft. 6 ins. to the terminal post-hole (Hole 6) of the revetment, and though between this and the next (Hole 7) its average breadth *in situ* was little more than 1 ft., opposite Hole 8 it is 3 ft. across, and 3 ft. further 4 ft. Its average height is 2 ft., and as numerous fallen blocks attest must originally have been a good deal more. It is well seen in Plate VII, No. 1. That this wall at least was contemporary with the heightening of the rampart, not with its original construction and that of the revetment, is well shown by Section 7, cut 3 ft. 6 ins. from Hole 6, where on the small bank of chalk piled against the foot of the revetting-timbers, plainly of the original construction-period, as has been noted above (p. 35), a foundation of chalky material was banked up, which is clearly to be correlated with the heightening of the rampart behind: in this foundation the wall, just over 1 ft. 6 ins. wide, is bedded. A similar section could not be obtained on the north, but it is only reasonable to ascribe both walls to the same date.

At a distance of 10 ft. on the north and 29 ft. on the south from the outer ends of the revetments, the walls cease by the post-holes which mark the right-angle turns made by the revetment to form on each side a bay in the flanking of the roadway, 7 ft. deep on the south and originally rather over 5 ft. on the north. The corners so formed present features of no little complexity.

THE CORNER OF THE NORTH BAY

Pit V and its Annexe.

The north side will be described first (see Section 8). It was here that the large pit (Pit V) was found which has been already mentioned. It was dug for occupation or other use before any fortifications were put up, and was subsequently

utilized in the construction of the Entrance defences. The flat bottom was 6 ft. below the original surface, and has an average breadth of over 4 ft. 3 ins., the measurement across the top being a little smaller, as it tends rather to beehive form, though not so much as Pit R (see p. 91). Its sides are not appreciably eroded at the top, perhaps shewing that, like Pit M, where the same feature was noticed, its period of use was short.

On the north it had a sloping annexe or adit nearly 6 ft. long, 4 ft. 3 ins. deep and 3 ft. wide where it runs into the pit, which here has a perpendicular side, and 2 ft. deep and just over 1 ft. wide at its narrow extremity, at which, standing upright against the vertical face of its end, the charred stump of a revetment-post was found, enclosed in a packing a few inches thick of chalk pebbles and clay (burnt to powder as usual). Its end thus formed a socket for the post, and from here along towards the pit it was filled with clean chalk, over which lay the original make-up of the rampart. Another post stood in the chalk filling some 3 ft. nearer the pit and 1 ft. beyond it a third, which was of ash. This stood just inside the pit itself, and was in fact the corner-post, already mentioned, of the bay, the eastern side of which was revetted by all these timbers in a line at right angles to the roadway. The chalk blocks of the end of Wall A were set all round this post, and the lowest of them were bedded round its bottom 4 ft. deep in the pit. South of these, and just free of them, two more posts stood close together in the pit, apparently unconnected structurally with the revetment: these may well have formed a double gatepost. While the post at the far end of the annexe stood in a packing to itself, the lower courses of the wall and all the four other posts described were enclosed together in a similar packing of their own, 4 ft. deep: this does not extend horizontally across the rest of the pit or annexe, or vertically below the bottoms of the posts and the lowest course of the wall. The remainder of the pit was occupied by an entirely distinct clean chalk filling, continuous with that mentioned above in the annexe. This filling contained many good-sized lumps, of which indeed in the bottom of the pit it was wholly composed. Among these, 1 ft. above the pit floor, and remote from the packing of the wall and posts, was found a fragment (V 1, fig. 12), of a small red bowl, with finger-tip ornament outside the rim, which can hardly be a very late type; near it occurred four other tiny potsherds without character and also a burnt flint pot-boiler,

with one or two bits of ox-bone. These must date at the latest from the time when the filling was put in, for it was definitely sealed, where not interrupted by the wall and posts, by the trodden surface of the roadway (here blackened by fire), as Section 8 shews.

The wall and posts, with their packing, broke the continuity of this surface layer, but though since their destruction a little charcoal and burnt clay powder had penetrated downwards between the chalk lumps in the low levels of the original filling, the latter was quite distinct, both in the pit itself and in the annexe.

Now the relationship of the annexe to the posts standing in it is peculiar; it is much too big to have been dug merely to contain them, but they evidently stand in it by design and not by accident. It is inconceivable that a pit previously filled up and forgotten, with an annexe of exactly suitable length and position to hold the revetment-posts of the proposed bay, was pitched upon in sheer good fortune by the builders of the Entrance, and equally so that the pit alone lay open and that they provided for the posts they wanted by cutting an annexe of such disproportionate size, and then filling it up again along with the pit. The only explanation is that both pit and annexe existed before the Entrance was contemplated and were seen to be adaptable to its construction; they were filled with clean chalk in which posts were planted where required for the revetments, the annexe proving convenient for the supports of the side of the bay, and then the rampart was erected as on virgin soil.

Such annexes to Early Iron Age pits are not unknown: Pit 89 at Swallowcliffe Down had one 7 ft. wide and 21 ft. long;[1] they may be considered either as enlarged specimens of the steps or seats exemplified in Pit A here (p. 88), as in Pit 34 at Fifield Bavant,[2] or alternatively and perhaps better as entrances, as in Pit 45 at All Cannings Cross,[3] where the slope up to the level ground surface corresponds to the level passage of Pit 51 there, which leads out to a sloping surface. The name annexe will be retained for convenience.

It is necessary of course to presume that the packing in which stood the posts at the corner of the bay was reconditioned

1. *W.A.M.* XLIII, pp. 59-93, pl. II.
2. *W.A.M.* XLII, p. 469 and pl. II.
3. *All Cannings Cross*, p. 73 and pl. 5.

at the time of the heightening of the rampart, to allow of the insertion of the lower courses of Wall A, since the analogy of Wall B assigns it to this date: in fact, there is nothing against the view that the two posts standing free of the revetment were inserted at the same time, if they really formed a double gate-post. The clay of the packing was found burnt to so loose a powder that it could not be determined whether it was formerly homogeneous or not, and in the absence of evidence from this source it is less difficult to believe that such a reconditioning took place than to suppose Walls A and B to be of wholly different dates. In any case there need have been no disturbance to the clean filling of the rest of the pit and annexe, and in fact important repairs to the northern revetment, connected with the heightening of the rampart, are attested in a manner now to be considered.

The Collapse of the Northern Revetment.

No traces of horizontal revetment beams were found along the side of the bay between the group of four posts surrounding the end of the wall and the other post at the extremity of the annexe, though the latter had evidently stood at the inner corner of the bay. The remains of a good deal of this inner corner-post were clearly to be seen above the old floor level, but this portion of it was entirely surrounded by the original make-up of the rampart, and completely covered by the additional material above. It did not penetrate upwards through the latter at all, and had obviously broken off flush with the surface of the former, which had fallen forward round its stump. With this peculiarity those encountered at the other end of this bay as shown in Section 4 are to be compared. Here the revetment had evidently been supported by a post standing in Hole 3, which was 3 ft. deep below the old turf-line, 1 ft. 6 ins. wide, and of the usual post-hole character; however, the post had been removed, leaving only two fragments of decayed wood. The hole was filled with white chalk continuous with the make-up of the original rampart above it, which has in fact fallen forward right over the hole and has been subsequently covered by the additional material, which was here only distinguished from it by the fact of being clay and not chalk, the well-marked surface stratum of the original make-up being here absent, though just beyond the hole it was unmistakable.

From here to the post previously considered the line which the revetment must have taken was not marked by any traces of horizontal beams, though these were plentiful elsewhere.

Clearly what happened in the northern bay was this. The weight of the rampart when heightened by the additional material proved too much for the strength of both these posts; they snapped, and both the old and the new make-up fell forward into the bay. It was not thought worth while to shovel this back and erect new posts in the same sockets: the horizontal beams (which may also have been broken) were pulled out, as was nearly all the stump of the western post, but the fallen material, along with the other post-stump, was allowed to remain, and a new revetment was made some 3 ft. further south, which had the effect of flattening out the bay almost entirely.

This new revetment was supported at the western end by a new post standing in a fresh hole (Hole 18), which was 1 ft. wide and only half the depth of Hole 3, and thus far smaller than all the others; in fact, it might on this ground alone have been guessed to be of a different date. From this hole the new line of timber-work was traceable by appreciable remains of horizontal beams, along a line almost parallel to what the old one must have been, to the post already described as standing in the annexe to Pit V some 3 ft. from its broken predecessor. This, then, became the new inner corner-post of the north bay. It is even possible that it did not exist before, and was actually erected for this purpose: but this is less likely, as a post was found in a corresponding position on the south bay which must have been present from the first.

At a time when the effect of the heightening of the rampart necessitated such important repairs, and when walling was being put up to support the revetment, there is nothing incongruous in the reconditioning of the packing at the corner of the bay to include such a new strengthening of chalk blocks, especially if, as has been suggested, new gate-posts were inserted, as is more than likely, in view of evidence to be discussed below concerning the gates. Anyhow the packing at this point cannot safely be considered to belong, in the form in which it was found, to a period earlier than the heightening of the bank, though whatever form it may previously have had, it must always have been distinct from the chalk filling of the rest of Pit V and its annexe.

No stratified finds were discovered which could amplify the evidence from the north side of the entrance now reviewed, and the corresponding corner of the bay on the south side will next be described.

THE CORNER OF THE SOUTH BAY AND THE BLOCKING OF THE ENTRANCE

Sections 8, 6 and 9 (fig. 6).

Here there was no large underlying pit clearly earlier than the fortifications: the corner post of the bay shared a hole, evidently dug specially for the purpose, with its neighbour, which stood in the middle of the return of the revetment forming the east wall of the bay. This is Hole 9, which was of oval shape, 4 ft. 6 ins. long by 2 ft. 9 ins. wide by 4 ft. 6 ins. deep below the old surface level; its eastern half lay under the original make-up of the bank, which sealed its white chalk filling, and the two posts, each enclosed in the usual clay and pebble packing, occupied either end of it.

The end of Wall B did not encircle the corner-post like Wall A, but stopped abruptly and turned northwards to follow the edge of a narrow regular trench, which ran at right angles across the southern half of the Entrance-way and connected Hole 9 with another hole of exactly similar dimensions (Hole 16) in the middle of the roadway. The trench was 11 ft. long, 3 ft. 6 ins. deep, 1 ft. 9 ins. wide at the top and just over 1 ft. wide at the bottom (*v.* Sections 8 and 9). The trodden surface of the roadway, here and there bearing traces of fire, covered its filling, which was of clean loose chalk, containing no large blocks and indistinguishable at the edges from the chalky subsoil underlying the rest of the road-surface.

This filling contained one fragment of coarse pottery, not exactly datable, and certain small splinters of decayed (not burnt) wood; it was continuous with the filling of the southern half of Hole 16, which, like Hole 9, was some 1 ft. 6 ins. deeper than the trench. A tapering annexe, resembling that of Pit V in form, extended for 3 ft. 6 ins. north-east of Hole 16, sloping irregularly from its narrow extremity to a depth where it entered the hole itself of 3 ft. below the roadway (see Section 6). The filling of the southern half of this annexe was continuous with that of the southern half of the hole, but the northern half of both was occupied from the bottom upwards by a wall of large

1. Wall B and the line of the S. revetment, seen from West. The measuring pole stands in Hole 8, and Hole 7 is visible beyond.
2. Hole 16 and Annexe, with Wall C, seen from South.

chalk blocks (Wall C) similar in construction to Walls A and B, about 2 ft. 3 ins. broad, and some 7 ft. in total length. (Plate VII, 2.) Presumably it originally stood to an appreciable height, though as found it rose a few inches only above the road-surface level.

Hole 16 itself, if trench and annexe be disregarded, exactly resembled Hole 9, and as the latter was obviously intended for the two posts found standing in it, the original purpose of the former may be presumed to have been the same. Two or more posts standing in such a socket in the centre of the Entrance-way can only have been gate-posts, and though no trace of any such was discovered, testimony to their former existence is provided by the presence 8 ft. to the south-west of this hole of another (Hole 17), 2 ft. across and 3 ft. 6 ins. deep, of the ordinary post-hole type, and in fact containing the stump of a post. This post, isolated in the middle of the roadway, can hardly itself have been a gatepost: if the entrance was spanned by gates at all, they can only have been between Pit V and Hole 9, as a glance at the plan will shew. But any structural connection between the post in Hole 17 and the sides of the Entrance is inconceivable, unless it be assumed that the whole Entrance was roofed. A simpler explanation seems to be that the post was put there as a stopper to prevent the swing of the opening gates exceeding 90°. But this theory is only applicable for gates pivoted on posts in Hole 16, and as no such posts formed part of the complex connected there with Wall C, the inevitable conclusion is that they must have existed before the latter was built, and have been removed to make room for it, the stump of the now functionless post in Hole 17 being covered up, as indeed it was found.

If these early gates were succeeded by others, these must have been pivoted at the sides, not the centre, of the Entrance, as is strongly suggested by the two posts already described in Pit V as probably gateposts, and they seem to have been unprovided with posts for stoppers.

> A hole very similar to Hole 16 has been found in the middle of the S.W. entrance of the doubtless contemporary fort of The Trundle, near Goodwood; it contained a post-hole at either end, in which wooden uprights must have stood to support either gates or perhaps a wooden gate-tower.[1]
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> 1. Curwen in *Suss. Arch. Coll.* LXX, pp. 42-4.

This provides an exact analogy to the presumed original function of Hole 16, to which we must now return.

The annexe is clearly not part of its original form, and is a later addition, being thus not comparable in function to that of Pit V. The digging of this and of the trench, and the erection of Wall C in one half only of the annexe and hole, must have been parts of a single plan, which involved the diverting of the hole from its presumed original use; but the existing remains by themselves furnish no adequate explanation of what this plan was. Something has evidently disappeared which once occupied the remainder of the hole and annexe and also the trench. Alone, these form no obstacle to passage, but their situation precludes the idea of any other purpose.

Now the filling of the space under consideration was not subsequent to the end of the occupation, for the violent fire which finally ruined the defences has left abundant traces elsewhere, but none in this filling, which must therefore have been put in and trodden down before the conflagration. The L-shaped excavation formed by the trench, hole and annexe, contiguous at one end with the corner-post of the south bay, and at the other end abutting on Wall C, should be explained by positing some obstacle, not yet present at the date of the first fortification, and already removed before the whole Entrance was wrecked: something, further, which by its presence caused Wall B to cease on the edge of the trench and to turn along it, without continuing to support the corner-post of the south bay, as Wall A did that of the north bay, in spite of the especial strain to which this post was subjected.

Only one conclusion seems permissible. The missing feature is a stockade, which must have been erected to block the southern half of the roadway, exactly comparable to the masonry blocking some of the fort-gateways on the Roman Wall, *e.g.* at Rutchester.[1] The otherwise inexplicable Wall C, built right down in the hole, thus falls into place as a support for the exposed angle of the stockade where its northern end turned north-east, socketed in the annexe, to form a solid central *spina* projecting outwards towards the enemy: the abrupt cessation of Wall B is also explained, as is its turning to run along the edge of the trench. In fact it seems likely that though only a few stones on ground level were allowed to remain after the stockade was removed, the wall originally fronted it along

1. *Archaeologia Aeliana*, 1925, p. 93 ff.

its entire length, and while at its northern corner it would have the support of the deeply-bedded Wall C, at its southern end it would itself support the important corner-post of the south bay.

It is believed, then, that after Hole 16 had, since the first construction of the defences, existed as the emplacement of a gatepost structure, this was at some time or other superseded: the annexe and the trench were dug, and along the whole excavation so formed a timber stockade was erected to block the southern half of the roadway, perhaps fronted by chalk stones forming a tail to Wall B, and supported by Wall C where at its northern end it turned outwards to form a *spina*, Hole 16 and its annexe containing the foundations of both. The stockade may be conceived as consisting of contiguous upright timbers braced by horizontal beams behind.

> There seems to be no record of a similarly blocked entrance in any British fort which has been excavated, but such a precaution would be a natural one at a time of danger, and Caesar mentions its employment by the Britons in Kent in 54 B.C. Driven back by his cavalry from a river, apparently the Great Stour, they retreated to a stronghold on high wooded ground, which must be Bigbury Camp on the line of the Pilgrims' Way about 1½ miles west of Canterbury. It appeared to Caesar that this fortress had previously been prepared for a local tribal war by the blocking of all the entrances with tree-trunks.[1] There is no reason, of course, to suppose that these were set in an excavation in the ground, and the blockage seems to have been total, not partial as at St. Catharine's Hill; but the parallel is close enough to attract attention, particularly as Caesar understood the blockages to have been made for the purposes of tribal warfare, as must have been the case with our presumed stockade, to which we may now return.

A more peaceful period must have ensued when it could be removed and its emplacement filled in. This step is in harmony with the conclusions, which will be suggested when all the Entrance remains have been considered, concerning the nature

1. Cæsar *B.G.* V, 9, 4: 'repulsi ab equitatu se in silvis abdiderunt, locum nacti egregie et natura et opere munitum, quem domestici belli, ut videbatur, causa iam ante praeparaverant; nam crebris arboribus succisis omnes introitus erant praeclusi.' *cf.* Rice Holmes, *Ancient Britain and the Invasions of Julius Cæsar*, p. 337, and p. 685 with the references there given.

of the defensive warfare contemplated by the builders of the defences. The small splinters of wood in the filling of the trench, hole, and annexe, which were especially numerous towards the bottom, would seem perhaps to owe their existence to the extraction of the timbers. It may be added that there was no trace of clay packing here.

The chronology of this portion of the work cannot be exactly determined, but as Walls A and B have been assigned to the period of the heightening of the rampart, it is natural to do the same with the very similar Wall C, and consequently with the whole stockade complex. Indeed, there is nothing against the very reasonable supposition that the deepening of the ditch, the heightening of the rampart, the building of the walls, and the erection of the stockade half blocking the Entrance, were all parts of a single scheme of reconditioning, undertaken presumably at a time of emergency. How long the stockade remained in existence it is impossible to say, but the absence of traces of clay packing suggests that it was only a temporary structure, unlike the other features of the work of reconditioning.

Certainly such an obstacle in the Entrance, however admirable in time of war, would be very inconvenient in time of peace, and its speedy removal when danger no longer threatened might reasonably be expected. Of course, there was every reason why the lower courses of Wall C should be left in the hole and its annexe where they were, when it was resolved to remove the stockade and fill in the whole excavation, and considering the nature of the traffic which must have used the roadway, there is nothing surprising in the slight projection above the surface of the uppermost remaining blocks, nor in the few left embedded in it from the former tail of Wall B close to its southern side.

THE BAYS

We have now to consider the bays themselves on either side of the inner half of the Entrance. It has been seen that their eastern ends were formed by returns of the revetment, 7 ft. deep on the south, and on the north 5 ft. before and 2 ft. after the collapse of the timbers due to the heightening of the bank. There were no corresponding returns at their western ends, and thus the revetment only enclosed them on two sides. The remains of its timbers, charred and ruined in the final disaster, were nevertheless considerable. All the posts on the

northern side have already been described, and as has been seen, it was not possible to bring them into relation with the apparently isolated post standing in Hole 2 on the other side of the rampart-end. A little to the south-west of Pit V, however, the discovery was made on the burnt floor-level of four big pieces of charred oak timber, 2 ft. in average length, lying side by side north and south, with another piece slightly longer lying over them at right angles. Another smaller piece lay just to the south-west of these, and the whole floor was covered with the remains of others burnt to smaller fragments and charcoal powder: clearly the whole revetment had fallen forward when its supporting posts gave way in the final conflagration.

On the south side the revetment-posts were the two already described in Hole 9, the inner corner-post standing in Hole 10, and three more aligned in Holes 11, 12 and 13 between this and the tail of the bank 23 ft. to the south-west. That in Hole 11 was of ash: all were packed in the usual chalk pebbles and clay, save in Hole 12 where there were only vestiges of clay, and in Hole 13 where it was altogether absent. It will be recalled that at this end of the revetment the rampart has no clay facing, though between Holes 10 and 11 it has a fairly thick one, especially where some 2 ft. 6 ins. south-west of Hole 10 a big beam was found running directly into the original make-up of the bank about 1 ft. 6 ins. above the floor of the bay. It had been about 4 ins. in diameter, and penetrated horizontally just 3 ft. inwards from the line of the revetment, the hole being well faced with clay. The purpose of this timber, the only one of the kind found, is obscure. Lying diagonally to the west of it were found the remains of two oak beams which could each be traced to a length of about 8 ft. They were evidently fallen horizontal beams from the revetment, but neither they nor the smaller fragments of the ruined woodwork (oak and ash) were found on the floor of the bay, from which the whole burnt layer representing the final fire was separated by a thick stratum of dark brown silt, in the body of which traces of burning were wholly absent, while below it the floor of the bay appeared as a clean unburnt layer of white chalk, as seen in Plate VI, no. 2.

As this photograph and the corresponding Section 10 shew, and Section 4 shews better, this silt sloped from a height of 2 ft. 6 ins. above the original floor where the revetment had stood down to ground level about 8 ft. further north, and the chalk material of the rampart had sagged forward against it

to an angle of some 20° from the original vertical as the result of the destruction of the revetment.

Except where the destruction-rubbish had penetrated its upper six inches or so, this deposit of silt was barren of remains, save for some bone fragments (ox, pig, and sheep or goat), and thus it affords striking evidence of the complete disuse of the southern bay for a long time before the final disaster. Effective occupation anterior to this period of neglect was represented by a good deal of broken pottery stratified at the old floor-level underneath it, as well as by fragments of ox and sheep or goat bones. Of the 42 sherds found, none were of the late types recognised in Pit R, and all were coarse work, very often with finger-print decoration ; three have been illustrated—E 124 (fig. 12), shewing the heavy flattened-out rim of a big coarse pot : E 126 (fig. 11), a rim with finger-print decoration along the top, and E 129 (fig. 11), similar but with larger finger-prints. Plain flat rims were well represented, as were angular pot-shoulders, but rounded rims shewing any tendency to the beaded type were absent. This absence of late types of pottery supports the major argument from the volume of the silt itself for the cessation at an early period in the history of the defences of effective use of the south bay. There is nothing to mark the reconditioning period here, and everything goes to shew that the period of neglect, so early begun, lasted without interruption till the end.

The absence of a corresponding deposit in the north bay is easily explained by the events of the reconditioning period. The reconstruction of the revetment here already described would mean the clearing away of accumulations already present, while its result was to make the bay so narrow as hardly to be a bay at all. Further, on this side the roadway was not blocked, whereas the south bay was put entirely out of the neighbourhood of traffic while the stockade was in existence.

However, the bays must have been in effective occupation to begin with, and further evidence concerning this early period is provided by the peculiar holes discovered in their area.

The small post-hole 18 has already been accounted for in connection with the reconstruction of the northern revetment after its collapse ; immediately south of it (see Section 4) was found a much larger and deeper hole (Hole 4) of circular shape, 2 ft. across and with vertical sides 5 ft. deep below the old surface level. This hole had been filled with entirely clean

chalk, slightly mingled with soil only near the top, and the surface stratum covered this filling without interruption. It was thus obvious that the hole had been deliberately filled up before the end of the occupation, and further, before the reconditioning period, because Hole 18, which has been seen to belong to that period, impinges on the filling. Though deeper than its neighbour Hole 3, it is of the average size of the original Entrance post-holes, and this at once suggests that it originally held a similar post, which had been subsequently removed, and the hole carefully filled up. Two coarse featureless potsherds were found in it.

In the south bay there are two analogous holes: Hole 14, 2 ft. 3 ins. in diameter and 5 ft. deep, and Hole 15 (see Section 4), 3 ft. in diameter and 3 ft. deep below the old surface stratum. Both were filled with quite clean chalk: the latter was straight-sided and only contained a little ox, pig, and sheep or goat bone, but the former (Section 10 and Plate VI, no. 2) was somewhat splayed towards the top, where its diameter was thus increased almost to 4 ft., its mouth being sealed by the surface stratum, which, here underlying the deposit of dark silt, was of clean chalk. Three coarse potsherds were found in its filling: one was E 106 (fig. 12), belonging to the neck and shoulder of a pot with a fairly curved outline, and the other two shewed the base-angles of pots, one being E 107 (fig. 10), in which there is a clearly visible joint between the base and the built-up wall. No precise chronology can be inferred here.

Along with these holes the peculiar Hole 13 must be considered. It contained the last post of the revetment at its inner end almost at the tail of the bank, but this post stood only at the extreme eastern end of the hole, which is an irregular oval nearly 5 ft. long and 3 ft. broad at its widest, with fairly straight sides some 3 ft. deep. As with Hole 16 above, the analogy of Hole 9 naturally suggests that it once held two posts, one at each end, of which the eastern alone was found remaining, the rest of the hole containing the usual clean chalk filling. It may thus be supposed that a post originally occupied its western end also.

Here, then, we have reason to presume the former existence of three posts aligned across the south bay so as to form a continuation of the line of the outer half of the revetment from Hole 6 to Hole 9. This naturally suggests a period when no

bays had as yet been cut back, and the revetment extended without interruption from Hole 6 to Hole 9 and so straight on to Hole 13.

Similarly on the north side Hole 4 lies on a continuation of the line on which the revetment runs from Hole 5 to the corner-post in Pit V, suggesting the possibility of a similar period of continuous revetment along this line before the cutting back of the bay. We should then be able to argue a natural development from a simple revetted Entrance-passage to one with bays.

However, this theory, though indeed attractive, cannot be maintained. In the first place, Hole 9 would on this hypothesis have been originally cut only to the size required for one post, the northerly one, and its extension to include the other, which supported the side wall of the south bay, would belong to the supposed secondary period at which the wall was cut back. But this extension is so wide that it runs right under the make-up of the rampart which was *ex hypothesi* already long in position. It looks, then, as if this hole was excavated to its present size before the rampart was erected : that is, that it belongs like the rest of the holes to the original construction-period, the holes being dug and the revetment set up first, and the rampart-material being then piled against it.

Secondly, on the north side, the conclusions reached above concerning the annexe to Pit V must on this theory be discarded.

In their stead, we are left with two equally unsatisfactory alternatives ; one, that the annexe was dug to hold the posts of the bay-revetment at the supposed secondary date of its cutting back, and the other, that a pre-existing annexe, buried and presumably forgotten, was then stumbled upon by sheer good fortune in the right place for the proposed new posts. The latter needs no refutation ; the former falls before the same argument used concerning Hole 9—the width of the annexe is absurdly disproportionate, and as most of it underlies the rampart it cannot have been dug once that was in position.

The theory of an original Entrance without bays is then untenable : a more satisfactory hypothesis is wanted to explain Holes 4, 13, 14 and 15.

It is possible that the Entrance was first designed without bays, and that the plan was altered during the progress of the work, after the holes for the initial scheme had been dug ; but except in special cases this type of theory is never convincing,

and there is no evidence here which would force us to have recourse to it.

The conjecture here to be adopted, while it cannot be conclusively proved, avoids any of the objections up to now entertained. It is that the bays were original features of the Entrance and remained throughout, but that at first each was provided with a roof, supported by posts standing in the holes under consideration, which was afterwards dismantled, and the post-holes filled up. The bays as originally designed may thus truly be termed Guard-Houses, being roughly oblong structures enclosed on two sides by the rampart-revetment, and on the other two by a timber wall. The extent of the northern guard-house is thus marked by the posts in Pit V and its annexe and by Holes 3 and 4 (with a possible extension in the uncertain area west of the latter, perhaps as far as, or even including, Pit T), while the southern one is bounded by Holes 9 and 10 and the revetment along to Hole 13, which contained at either end the two posts forming the limit of the structure in this direction. Between here and Hole 9 the wall facing the roadway was supported by posts in Holes 14 and 15, which are curiously close together in a manner suggesting the jamb-posts of a doorway.

While this theory may be thought so far to admit of acceptance only by default of other explanations of the evidence, it gains positive support from the resemblance of the quadrilateral plans of the conjectured guard-houses to the known outlines of timber buildings of the Early Iron Age both in Britain and on the Continent. The Hallstatt—La Tène I period settlement at Park Brow near Cissbury shewed hut-sites of angular form, in marked contrast to the circular Bronze Age dwellings near by, and one of them was marked by a set of post-holes which had evidently supported the roof and which resembles in plan those here attributed to the guard-houses.[1] A striking parallel to the Park Brow remains was brought forward by Mr. Reginald Smith[2] from Württemberg, where at the mountain-site of the Lochenstein, near Balingen, a house of the Hallstatt D period has been excavated which had its post-holes arranged on a similar though rather more developed plan. It is notable here

1. *Archaeologia* 76, pp. 1-39, especially pp. 30-36.
2. *ibid.* pp. 26-29, quoting *Fundberichte aus Schwaben*, Neue Folge, ii (1924), p. 73, especially taf. III.

also that, whereas no stonework of this date was found, the later settlers of the La Tène period made a partial use of dry stone walling in conjunction with timber uprights in a manner which recalls the association of Walls A and B with the timber revetment in the St. Catharine's Hill Entrance, which we have seen to have been effected as part of the reconditioning of the works at a date which must fall well into the same La Tène period.

The roughly rectangular timber buildings of the Hallstatt culture have been fully recognised in Germany, and their distinction from the improved work of La Tène times, in which stone begins to play a part, has been pointed out.[1] Though the development must be rather later in Britain, the parallel with Germany is interesting and important, especially in view of the connexion which will be urged below between the British Iron Age culture and that of the Rhine area.

At St. Catharine's Hill no hut-sites were found inside the defences comparable to German examples in the same way as those at Park Brow, for the only habitations discovered were pit-dwellings; but since this type of timber construction is so fully attested for this period, the theory that the Entrance was flanked by guard-houses thus built, set back from the roadway on either side in bays in the rampart-ends, has a good deal to commend it. It is in fact difficult to see otherwise why the bays should have been devised at all. Further, the fact that Hole 13 lies some little distance beyond the tail of the original rampart is most naturally explained if it be considered to have held the uprights of timber-work that served not only to revet the rampart but also as the wall of a guard-house that extended rather further west than the earthwork.

However, in the light of the evidence already reviewed of the thick deposit of barren dark silt in the south bay, it is obvious that, if this was originally the site of a guard-house, it was disused quite early in the history of the defences. Though, as has been said, an appreciable amount of pottery was found stratified on the floor-level under the silt, yet this level consisted of a stratum of trodden chalk in fairly clean condition (see Sections 4 and 10 and the photograph Plate VI, 2, corresponding to the latter, where the floor-level shews well as a white streak),

1. *e.g.* Schumacher, *Siedelungs-und Kulturgeschichte der Rheinlande*, I, pp. 110-11 and 157-8, with taf 15; also Behn, *Beiträge zur Urgeschichte des Hauses*, in *P.Z.* XI (1919); p. 70 ff.

and was not foul or blackened by fire as one might have expected after a long-continued occupation.

These Sections 4 and 10 have a further interest from the fact that they shew this floor running over the clean chalk filling of Holes 15 and 14 respectively, which we can now attribute with some confidence to the date of the removal of the roof; in fact, the floor-material and the filling of the holes are indistinguishable, and evidently when the guard-house was dismantled there was no thick occupation-layer on its floor to which the chalk filling of the disused post-holes would afford a contrast. The chalk of the floor was clean enough to present a surface indistinguishable from that of the post-hole fillings when both were trodden down together, and evidently silting from the top of the bank above began immediately, entirely sealing the old floor-level.

The filling of Hole 4 on the north side has already been described, and the fact there noticed that the later Hole 18 impinges upon it is now seen to have a great importance, in dissociating the dismantling of the presumed guard-house roofs, which involved the filling of Hole 4, from the period of general reconditioning, which involved the digging of Hole 18; for the latter was evidently dug in ignorance of the existence of the former.

What the chronological sequence was may be inferred from the following considerations.

A comparison of the finds in the ditch with those from the material added to the rampart at the reconditioning period has already shewn us that the latter is likely to be a good deal nearer the end than the beginning of the occupation of the defences, while the appearance of the floor of the south bay has been seen to suggest an early date for the dismantling of the guard-houses. It follows that a comparatively long period must have elapsed between these two events, and that this was a period of neglect has already been pointed out. No doubt it was during this that much of the dark silt in the south bay formed—there would be no necessity to remove it at the reconditioning period, as there was evidently no question then of renewing the guard-houses in their original form, and anyhow there was space for defenders behind the new stockade across half the old roadway. On the north side affairs took a different course owing to the collapse of the revetment at this date, as has already been sufficiently emphasized.

EVOLUTION AND CHRONOLOGY OF THE ENTRANCE (fig. 7).

All the features encountered in the excavation of the Entrance have now been described, and it is time to gather together the various scattered chronological indications which have been noticed in different places, and to reconstruct a connected history of the Entrance defences, so as to illustrate their evolution and furnish if possible a basis for the understanding of some of the habits of the people who built and used them.

The reconstruction is illustrated by a series of four plans (fig. 7) shewing the works at the four apparent periods of their history, which are lettered A, B, C, and D, and will be briefly described in order.

Period A.

We have seen reason to date the first construction of the defensive works towards the close of the La Tène I period. The site selected for the Entrance was on the N.E. side of the area to be enclosed, facing the middle of the neck of land connecting the hill with the plateau to the east, which must at all times have been the principal approach. Three pits probably already existed on this site: it is probable that two of these (M and T) were now filled in with clean chalk, and certain that the other (V) was. The ditch dug all round the hill was interrupted so as to leave an Entrance causeway some 40 ft. in width, flanked by its square-cut ends. Outside this the low counterscarp bank was strengthened with double-splayed ends. Inside it, the continuation of the Entrance-way was guarded on either side by the gently incurved ends of the rampart, the southern return being rather higher than the northern. It was also rather more extensive, as the roadway between the two was set askew with the line of the causeway flanked by the ends of the ditch, so that anyone entering would have to make a quarter turn to the right. The effect of this would be to expose to a certain extent the shieldless right side of an attacking enemy crossing the causeway to missiles from the rampart on the north, but the skewness is not really sufficiently pronounced to give the defenders a very great advantage in this way, and possibly it is the result of accident, not of design. The chalk material of the ends of the rampart, generally piled in two successive tips, was faced where it flanked

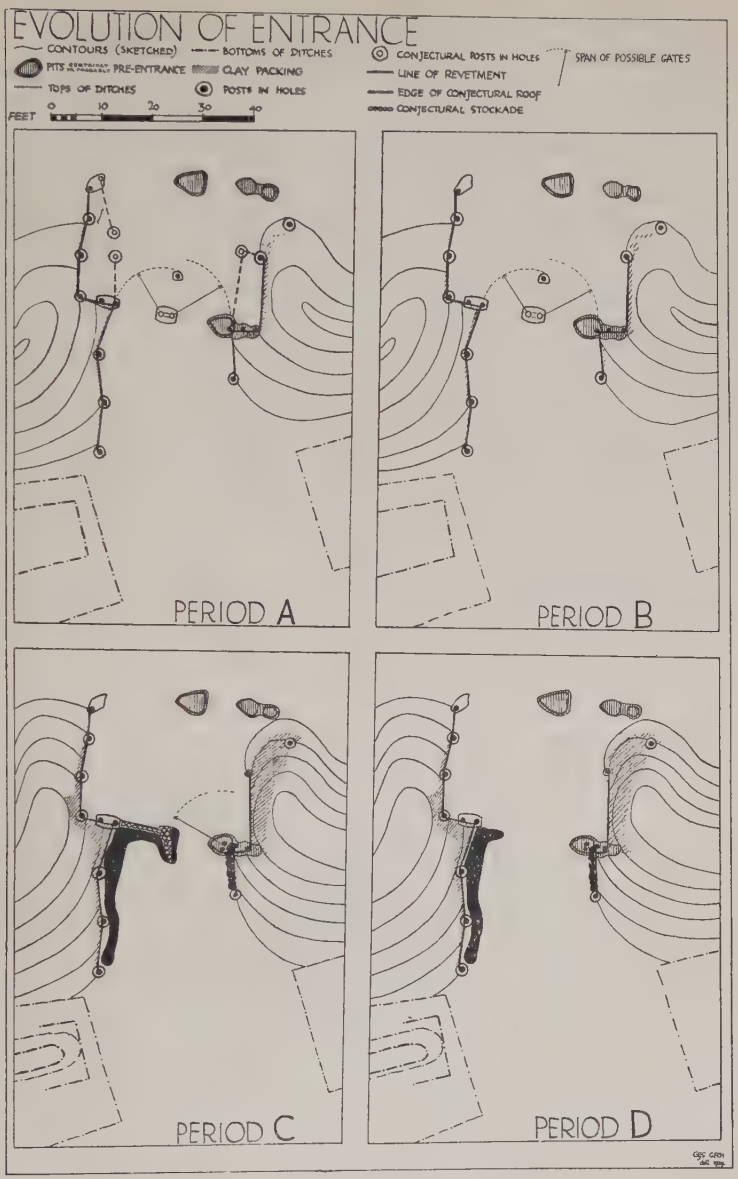
EVOLUTION OF ENTRANCE
CONTOURS (SKETCHED)
BOTTOMS OF DITCHES
PITS
PRE-ENTRANCE
CLAY PACKING
TOPS OF DITCHES
POSTS IN HOLES
FEET 0 10 20 30 40
CONJECTURAL POSTS IN HOLES
SPAN OF POSSIBLE GATES
LINE OF REVETMENT
EDGE OF CONJECTURAL ROOF
CONJECTURAL STOCKADE
PERIOD A
PERIOD B
PERIOD C
PERIOD D

FIG. 7.

the roadway with a thin layer of clay and revetted with a timber fence which probably was high enough to form a breastwork for defenders. It consisted of horizontal beams supported at intervals by vertical posts. At the narrowest point of the passage two or more posts were set in the middle of the roadway on which gates must have been hung, spanning the approach on either side. A post was set up behind as a stopper against which to make the gates fast when open: when closed they could be secured against the posts of the flanking revetment marking on each side the point where the rampart-ends were cut back to form an oblong guard-house, timber-built continuously with the revetment, and backed by the material of the earthwork. These guard-houses were certainly occupied, as finds of pottery show, and must have been roofed: the southern one at least had a central door with stout jamb-posts. The posts supporting all this timberwork were set in holes of varying sizes and packed with chalk and clay, the pre-existing Pit V and its annexe being utilized to hold those at the east end of the northern guard-house.

These works were clearly erected in anticipation of serious danger, and testify to a considerable degree of co-ordinated effort by the inhabitants.

Period B.

How long the defences remained in their original state is not known, but the next step was one not of improvement but of demolition. The guard-houses were dismantled. Their roofs were removed and their back walls, which also formed the revetment of the rampart-ends, were alone left standing. The post-holes which had held the uprights of their front walls were filled up with clean chalk, and thus two open bays were left in the revetment on either side of the roadway. It is quite probable, though not certain, that the gates and their central supporting timbers were left, but from now onwards the bays where the guard-houses had been were allowed to become filled with silt, and it is evident that for a comparatively long time the defences were neglected. There was clearly no danger which required the fortifications to be kept seriously in commission.

Period C.

This peaceful time ceased abruptly early in the La Tène II period, not very long before the final destruction. There was presumably a "war scare," and the impending peril aroused the inhabitants to recondition their obsolete defences. The ditch was cleaned of its accumulated silt for a considerable distance on either side of the Entrance causeway, and a new and deeper bottom to it was cut, with rounded ends below the causeway flanks. The material so obtained was used to heighten the ends of the rampart and to prolong and accentuate their inward turn guarding the Entrance-way. This additional earthwork was edged on the outside by a kerb-line of rough chalk blocks, and on the inside behind the revetment was given a waterproofing face of clay, for the most part of great thickness. Its weight, however, proved too much for the revetment of the north bay—its supporting uprights snapped, and a mass of chalk fell forward into the bay. Perhaps because the danger of attack was so pressing, the labour of shovelling it back was not undertaken—instead, the prompter course was adopted of leaving it where it was and making a new revetment some three feet further forward, thus almost nullifying the now functionless bay. It is perhaps significant of the haste in which the work was done that the new post-hole dug for this purpose was allowed to be dangerously small.

Whether or no the former gates were still in existence, they were now superseded, for the Entrance, 25 ft. across, was thought too wide to be safely defensible, and it was decided to block its southern half. The old central gate-post socket was connected with the southern revetment by a trench in which a stout timber stockade was bedded, spanning the south half of the roadway from the outer corner post of the southern bay right out into the middle, where it turned outwards to form a sort of central *spina*, for which an extension of the former gate-post hole formed a socket. The north side of this *spina* was supported by a wall of chalk blocks, bedded right down in the excavation so formed, and this wall was probably continued on the surface right round the front of the stockade across to the southern rampart-revetment, against which a similar chalk wall was built right out to its end. The northern revetment was also given a supporting wall for the short distance between its further end and the outer corner post of the north bay, the bedding of which was reconditioned to allow the lower courses

of the wall to be set all round its bottom end to a depth of 4 ft. At the same time a double gatepost adjacent to this seems to have been inserted for a new gate spanning the now greatly reduced width of the roadway.

We have already noted the skewness of the lay-out of the Entrance; even if this was not originally intentional, it was skilfully turned to account in this period, for the stockade with its projecting *spina* turned the whole southern half of the Entrance into a trap into which, owing to the skewness of the approach, a straight rush across the causeway would precipitate a storming-party. The assailants would have to bear to the right to reach the gate, and this was a narrow bottle-neck exposed to close-range fire from three sides.

But while admitting the skill shewn in designing the improved defences, we must note that no attempt was made at the same time to rebuild the guard-houses: the northern bay practically disappeared in the rebuild described above, and the southern one was left choked with silt as before.

The general effect of a review of the activities of this period is to give an idea of drastic measures taken in a hurry at a time of emergency. From whatever quarter it was that the danger threatened, it seems to have been safely surmounted. The effect of the renewal of peace-time conditions is strikingly shewn in the sequel.

Period D.

This is nothing less than the complete dismantling of all the timber defences put up in Period C. The stockade was removed, the trench which had held it filled up, and its northern supporting wall levelled to the ground. In fact, the chalk walling was only retained along the flanking revetments, a mere stump of the facing of the stockade remaining on the south.

Though of course the ditch was now permanently deeper and the rampart higher than before, the defences were reduced to a state closely resembling that of Period B, or even one less effective still, for while the original gate may well have been then still in existence, in this period there can have been no gates at all: while the two posts by the outer corner of the north bay still remained, there is nothing in the centre to correspond with them, and a single-span gate across the whole Entrance would be impracticable.

This concluding period seems to have been of no very long duration, and to have ended before the middle of La Tène II; but before considering the destruction which supervened, it is desirable to see what inferences can be drawn from this review of the history of the entrance defences.

EVIDENCE FOR WAR AND PEACE

First of all, the settlement on the hill existed for some considerable time without any defensive works whatever. It is probable, as will be seen in a later chapter, that the immigrations which brought the settlers to the spot were sporadic and the reverse of organised. Such small bands of immigrants settling here and there over southern and eastern Britain are not likely to have possessed the social organisation, capacity for co-ordinated effort, or command of resources necessary for undertaking large works of fortification. By degrees, however, their evolution reached a higher level. Hill-top fortresses were previously not unknown on the Continent from which they had come, and the gradual aggregation of tribal units would both make occasional warfare inevitable and afford the means for taking effective war measures.

After perhaps as much as two centuries, then, the inhabitants of St. Catharine's Hill fortified their natural stronghold with a rampart and ditch. They knew how to take advantage of natural contours, and in constructing the Entrance they employed the device of curving the ends of the rampart which flanked it inwards and perhaps also of setting its axis askew, the better to control the approach. The stout timber revetment, the effective gates, and the carefully placed guard-houses make the work one of no mean order, and it must have been a very adequate defence against the dangers of warfare which it was designed to withstand.

However, it would seem that peace was normal and war exceptional; for a period, evidently of some length, next ensued when the works were neglected and partly dismantled. There was no need to compel picquets to garrison the guard-houses: there was some value in their timbers, and they were taken down, no doubt to be used elsewhere.

But when at last war conditions were again threatened, vigorous efforts were made to make the Entrance, naturally the weakest point in the fortifications, impregnable. It was greatly

strengthened, and partially blocked by the method later observed by Caesar to have been elsewhere adopted in a similar emergency.

And again when peace was restored it was the same story. If no serious warfare was on hand, all that was wanted in the Entrance was uninterrupted passage, and it was accordingly cleared of its obstructions, and shorn of much of its military value.

That intermittent raiding in the countryside went on in the periods here called times of peace is more than likely, but clearly there was seldom any question of serious hostilities between tribe and tribe—in this case only twice in a total period of perhaps four centuries. The two plans, therefore, on the left of Fig. 7 (Periods A and C) belong to abnormal war conditions, and the two on the right (Periods B and D) to normal peace conditions.

It will remain to be seen how far future excavations on other sites will bear out this estimate of the conditions of life in Southern Britain in the Early Iron Age.

THE FINAL DESTRUCTION

It is somewhat surprising, after considering the foregoing evidence, to find that though the defences were clearly finally destroyed by a conquering enemy, no steps seem to have been taken after the neglect of Period D to put them in repair to meet the fatal onset. One can only suppose that the inhabitants were taken by surprise.

The disaster seems to have occurred during and not after the middle of the La Tène II period—the middle of the 2nd century B.C. is a date more likely to be too late than too early. Who the destroyers were must remain a matter for conjecture (see p. 175 below), but from whatever quarter they came, they did their work with ruthless thoroughness. There is no trace of effective occupation on the hill after this until the Middle Ages, and the intensity of the conflagration which they effected in the Entrance may well provoke astonishment. The extent of the abundant traces of the fire has been noted in detail above; not only was the timberwork ruined, spreading as a black charcoal layer over the bays and across and along the roadway as shewn in Fig. 5, but the material of the earthworks themselves was penetrated to a remarkable depth. Thick as was the clay facing, especially on the north

side, no portion of it was found which was not reduced to a light brick-red powder, and the chalk behind it was in several places burnt grey. The fire had clearly had a more ruinous effect on the north than on the south, and it is easy to see that the prevalent south-west wind was blowing at the time. The flames thus fanned accomplished a very effective destruction. Silt from the upper part of the banks slid down over the charred rubbish (*v.* Sections 4 and 8 especially), and the turf which grew over it has remained undisturbed until the excavations began.

The phenomena of the destruction seem to invite comparison with the " vitrified forts " of Western and Central Europe and Scotland, the stone ramparts of which have been subjected to so high a temperature that their internal material has become fused into a solid calcined mass of vitrified rock.

It is hard to see how heat of such intensity could be produced —*e.g.* at Lourdon near Roanne, rock has been found thus vitrified which does not fuse under 1000° centigrade. But here, at the Stromberg in Silesia, and elsewhere, the vitrified walls can be shewn to have been of the half-timber construction of the *murus gallicus* described by Caesar (*B.G.* VII, 23) at Avaricum, and constantly met with in the Celtic area of Europe, in which the stonework was interlaced with a stout timber framing. The vitrifaction can thus be accounted for by the argument that, if once such a wall got really alight, the timbers penetrating the stonework would, as they gradually burned out, create flues, along which the heat would permeate the structure by a forced draught and vitrify the stone as in a furnace.[1]

The intensely burnt condition of the ramparts flanking the Entrance, more especially of the thick clay facing, suggested that they might have been built, and consequently at last ruined, in a similar manner, and great care was therefore taken to see whether any traces of construction resembling the *murus gallicus* could be found.

But the essential feature of this is that horizontal and transverse timbers should inter-penetrate the rampart, and as has been seen, only one horizontal timber was discovered running back from the revetment into the bank. It will be remembered that this was between holes 10 and 11 in the south bay: it was

1. The whole matter is reviewed by Déchelette, *Manuel* III, pp. 192-201. More recently, however, a vitrified rampart of peculiar construction has been discovered at the *oppidum* of l'Impernal, Lot: this is of Hallstatt date, and differs materially from the stone and timber La Tène rampart which succeeded it: *B.S.P.F.* XX, p. 51 ff.

indeed surrounded by clay burnt to powder, but no such thing was found anywhere else.

The intensive burning of the clay and some of the chalk of the rampart must consequently be put down to the blaze made by the contiguous revetting timbers only. Its effect seems certainly to have been remarkably severe, even allowing for a high south-westerly wind : but the fact, though surprising, appears to be indisputable, and there the matter must be left.

NOTE ON THE USE OF TIMBER IN EARLY IRON AGE FORTIFICATIONS

We have seen that in spite of the resemblance of the burnt-out Entrance works to those of "vitrified forts" which can be shewn to have been of *murus gallicus* construction, this method of half-timber building is not exemplified at St. Catharine's Hill. Nor, indeed, has it been discovered anywhere in Britain,[1] in fact, the use of any kind of timberwork in Early Iron Age fortifications has in this country hardly been attested at all.

In view of the persistent assertion that timber palisading, etc., must have been employed in such works, which is often made in spite of the lack of evidence, it is perhaps worth while to review the matter at this point, reserving consideration of entrances for a further Note below.

In discussing Danebury near Stockbridge, Dr. Williams Freeman[2] suggests that palisading was set in the bottom of the ditch: Mr. Hadrian Allcroft in his *Earthwork of England* (p. 186) believes in palisades on the tops of ramparts, and gives two examples to be considered presently; while in so excellent a little book as the Quennells' *Everyday Life in the New Stone, Bronze, and Early Iron Ages* (p. 32) the tops of banks are said to have been palisaded, and the bottoms of ditches filled with sharpened stakes, and this is illustrated in two admirable drawings (figs. 28, 29).

The idea is in every way reasonable, and the purpose of the present note is not necessarily to discredit it in any way, but to consider the actual evidence.

Excavation seems to have revealed no evidence at all for stakes or palisading in the bottoms of ditches in Britain, though it exists abroad (see below). Were there any traces of this in excavated ditches, they would not be likely to escape notice, as in the hard rock or chalk in which such ditches are usually dug the holes for the timbers would be unmistakable.

Of palisading along the top of a rampart there appears to be only one instance recorded, and that not in detail. In Davis and Thurnam's *Crania Britannica*, Vol. II, p. 3 of letterpress to pl. 51, it is stated that Martin Atkins found traces of strong

1. There appears to be one possible but not at all certain instance in Scotland that of Castle Law, Forgandenny (Perth): see *P.S.A. Scot.* XXVII, p. 14 ff. This and Burghead (Elgin) are the only instances of any sort of timber-work in Scottish fortifications, according to Christison (*Early Fortifications in Scotland*, p. 155), though as has been seen, it may have been present in vitrified forts.

2. *Proc. H.F.C.* VI, p. 298.

palisading in the chalk rampart of Uffington Castle on the Berkshire Downs, but died before being able to publish it. Presumably the post-holes of a palisade running along the top of the rampart are meant. Further excavation on this site is very desirable; in any case, the rampart might be regarded as exceptional, in view of the retaining-wall of sarsen of which Mr. O. G. S. Crawford has noticed likely traces.[1] But for the present it may be regarded as a valid instance: it is so mentioned by Mr. Allcroft (see above)—but it is the only one, for in the other case he mentions, that of Bantham Camp near Thurleston, Devon, the timbers discovered seem only to have been piles in the adjacent marsh,[2] while Lane-Fox (Pitt-Rivers), who also cites Uffington Castle, was mistaken [3] in relying on the evidence of the *Visitors' Guide to Weston-super-Mare* for the presence of sockets for a palisade along the top of the dry stone rampart of Worlebury, Somerset, as was shewn by Dymond and Tomkins in 1886 (*Worlebury*, 1st Edn., pp. 29-33 and 58-60), who also scout certain other alleged parallels in ramparts of the same kind.

In his careful excavation of the fortifications at the Caburn, near Lewes,[4] Lane-Fox (Pitt-Rivers) discovered stake-holes aligned at irregular intervals along the upper rampart near its outer edge. They were 2 ft. below its surface, and ran nearly 3 ft. below the old turf-line under it. Five were found in all, but the line was not found to be continued further either way—this may have been due to disturbance. Three other stake-holes found in the lower rampart were attributed to a previous wattled hut, but there is no doubt about those in the upper rampart, which was held to be the earlier of the two, being prior to the finer quality pottery (*i.e.* later La Tène) and associated with the inferior quality, which may be compared with the coarse ware typical of St. Catharine's Hill. The section cut was some way from the entrance, which has not been excavated, but in their relation to the body of the earthwork these stake-holes present a certain analogy to the revetment-posts in the St. Catharine's Hill Entrance, so that it is interesting to note that the pottery shews the two earthworks to be in some degree contemporary. Lane-Fox considered the holes were too shallow

1. See p. 38 above. Mr. Stuart Pigott tells me that he has come across evidence that diggings for sarsen have been made in this rampart, which bears out Mr. Crawford's observation.
2. *V.C.H. Devon* I, p. 580.
3. *Arch.* 46, pt. 2, p. 460.
4. *Arch.* 46, pt. 2, pp. 452 ff, with pl. XXIII facing p. 426.

(the average depth was 2 ft. to 2 ft. 6 ins.) to have supported a revetment to the bank, and decided that as they were some little way back from its outer edge the posts that stood in them were carried up through it to support a "vallum" surmounting it. He based his opinion on the British War Office *Manual of Field Engineering*, 1877, which lays it down that holes must be 3 ft. to 4 ft. deep even to support the weight of a stockade alone. As the revetment-posts in the St. Catharine's Hill Entrance were on an average at least 3 ft. 6 ins. deep, his contention is perhaps justified, but if we conclude with him that the Caburn holes supported a "vallum" ('breastwork' would perhaps be a better word) surmounting the rampart, we must, from the position of the holes, understand by this one standing some way down its outer slope.

As we have conjectured above that the revetment in the St. Catharine's Hill Entrance was carried up to form a breastwork for defenders on the slope of the rampart behind, the analogy is still fairly close: the position of the breastworks relative to the body of the rampart is the same, and even if the Caburn posts may not be considered as a revetment proper like those at St. Catharine's Hill, they must have contributed something to the stability of the rampart, and to that extent have served the purpose of a revetment.

Timber-work in fortress entrances will be discussed under a separate head; meanwhile this concludes the scanty list of evidence for its presence along the line of the defences in British fortresses of the Early Iron Age. There are in fact only two cases: one (Uffington Castle) in which a palisade ran probably along the top of the rampart, the other (Caburn) in which it ran along the side, some way down the outer slope, and may be considered in some sense also as a revetment like that of the St. Catharine's Hill Entrance.

Certain holes, apparently of post-hole type, filled with clean chalk, were found under the rampart of Winkelbury Camp in one place by Pitt-Rivers,[1] but he seems not to have considered them worth describing, and they do not form a very weighty piece of evidence: the same may be said of three found in a similar position at Oliver's Camp, near Devizes,[2] two of which seem if anything to have something to do with the entrance, which they are very near.

1. *Excavations*, Vol. II, plate CXLV.
2. Cunnington in *W.A.M.* XXXV, p. 420, with fig. 3.

This paucity of evidence is curious in view of the innate likelihood that timber defences would be employed, and also of their advanced development in Neolithic times,[1] and their use on the Continent in the Hallstatt period as well as in the later (La Tène) period of the Early Iron Age.

In south-west Germany, timber remains have been found in the rampart of the Heunenburg near Riedlingen dating from the Hallstatt C period,[2] while the Hallstatt fortress at Koberstadt [3] had double ditches with rows of stakes along the bottom, and in addition to a wall, sometimes doubled, strong palisades of stakes set alternately for interlacing with a hurdling of thorns. In northern Germany, where the Late Bronze Age was contemporary with the Earlier Iron Age further south, the Römerschänze near Potsdam [4] provides a most remarkable example of Germanic earth and timber fortification: the solid earth rampart contained a continuous wooden framework carried up to form a breastwork above, making interesting comparison with the Celtic *murus gallicus* already described. How early this latter mode of construction was practised is not certain; it was, anyhow, prevalent throughout the Celtic area from the Early La Tène period, and is pre-eminently exemplified in La Tène III (1st century B.C.).[5]

The abundance of continental material in this regard is in fact too great to permit of detailed reference here, and it forms a striking contrast to the meagre British evidence. Even allowing for the immense number of British hill-forts partly or wholly unexplored, the extreme rarity of recorded traces is remarkable.

There is of course no reason whatever to suppose that timber was everywhere employed: it is often rare in the upland regions where hill-forts are commonest, and the excavated forts where no traces of it have been found may be paralleled by similar cases on the Continent.[6] Nevertheless, it is possible that in many cases it has existed but has disappeared.

1. Lehner, *Der Festungsbau der jüngeren Steinzeit: P.Z.* II (1910), pp. 1 ff; cf *Suss. Arch. Coll.* LXX, pp. 73-5.

2. Bersu in *Fundberichte aus Schwaben*, n.f. I (1922), pp. 46-60.

3. Kofler in *Archiv. für hessische Geschichte und Altertumskunde*, n.f. III (1902), p. 215 ff.

4. Schuchardt in *P.Z.* I (1909), pp. 209 ff.

5. Déchelette, *Manuel* IV, chapter 2, passim: Schumacher, *S.K.R.* I, pp. 131-144.

6. As in the Gard region of Southern France, which is sparsely wooded (Déchelette *Manuel* IV, p. 504). In dealing with the forts of the Taunus region, Thomas (*Mitteilungen des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, XII (1909), No. 4, p. 103), seems to overstress the idea that timber-work must have been much more generally employed than modern discoveries warrant, as any dry stone wall would rapidly disintegrate without it, and atmospheric action might easily account for its disappearance. Neither argument seems very sound.

Palisades may have existed along the tops of some dry stone ramparts, but discovery of their traces is obviously hardly to be expected (this applies to the case of Worlebury mentioned above), but in earthworks any use of heavy timber-work is clearly rare in this country. However, it is allowable to guess that light palisading or fencing was sometimes erected along the crest of earth ramparts, and has vanished without a trace, as it would not require bedding deep enough to escape natural surface disintegration. This suggestion has already been made in considering the St. Catharine's Hill defences (see pp. 19, 28, and 39 above), and it gains in plausibility from the argument that it would commend itself under primitive conditions as being easily cut, easily replaceable, and probably as effective a protection as would be required before the days of anything like regular siege warfare. Clearly proof of this conjecture is impossible, but it may reasonably be entertained.

NOTE ON THE DEVELOPMENT OF EARLY IRON AGE HILL FORTS AND THEIR ENTRANCES

The regional survey of ancient fortified enclosures is now an institution of fairly long standing, and in the last twenty years or so the formation in several countries of special committees for the purpose has borne excellent fruit. A large mass of statistics has been accumulated, and plans and profiles as well as verbal descriptions are often available. However, as the pioneer of this work in France has pointed out,[1] fortification is an almost universal product of man when a certain stage of his evolution has been reached, and all that surface inspection can do is to record and classify according to type. To make the typology chronological is impossible without a great deal of excavation, and this stage in the study of the subject has not been widely reached. But two main points at least are clear in this regard: fortification begins in the Neolithic period, and is intensively employed in the Early Iron Age, especially towards its close. The former had a technique of its own, and can hardly concern us here: the latter has been generally recognised, and has in particular formed the subject of a stimulating essay by Dr. R. E. M. Wheeler concerning the hill forts of Wales and their relation to those elsewhere in Western Europe.[2] The 1st century B.C. (or La Tène III period) saw a great advance in town-life in Gaul. The Gallic *oppidum* was no mere "camp of refuge," but a regular fortified town, and naturally the contemporary art of fortification made great strides, especially in the practice of guarding entrances (inevitably the weakest points in defence) by inturning the rampart-ends to flank the approach on either side. Dr. Wheeler suggests that elaborate fortifications, usually having this peculiarity, were introduced into Southern Britain from Gaul in the 1st century B.C., and thence into Wales, where they became highly developed in the great fortresses known to have been occupied in the later Roman period. A comparative chart (*op. cit.*, p. 88, fig. 31) of examples of this type of entrance admirably illustrates the point.

Now many of the Welsh forts have been dated by excavation, and some of those in Southern Britain also, and this correlation of both with the big Gallic *oppida* of La Tène III is unimpeach-

1. A. Guébhard in *C.P.F.*, Vannes, 1906, p. 157. His pleasant if somewhat rhetorical address on "*Camps et Enceintes*" in *C.P.F.* Autun, 1907, pp. 997-1036, forms a stimulating introduction to the whole subject. F. Behn's article "*Festung*" in R.V. III is an indispensable summary, though severely dry.

2. *Roman and Native in Wales*, Honourable Society of Cymmrodorion, *Transactions*, 1920-21, p. 72 ff.

able. It is, in fact, the first attempt that has been made to connect the forts of Britain and the Continent by means of dated examples of a common type. But a review of the results of excavation, some of it subsequent to Dr. Wheeler's article, seems to show that the matter can now be carried further. The dating of forts by excavation is in fact just beginning to make some approach possible to a classification that shall be by chronology as well as by type, and though such an attainment is still very far off, it seems permissible to see what can be done in this direction, little as it is, in this Report, in view of the unexpectedly early date established for the St. Catharine's Hill earthwork and its inturned Entrance.

Of the Neolithic period, it is enough here to say that some fortified sites of this date continued in occupation even down to the Roman period,[1] while it is remarkable that in north-west Europe no such sites of exclusively Bronze Age date seem to be recorded—a serious reversal of the theory formerly prevalent at least in England, for which a reason has been suggested in the semi-nomadic life of most Bronze Age people. It is in fact in the Hallstatt period that fortifications begin to appear more widely in the regions under review. It is true that it was pre-eminently a time in Western Europe of open agricultural life, yet advance in organisation inevitably brought men to more warfare and the need for defences, while influence was more and more coming in from those Mediterranean lands where the art of fortifying had long been carried to great perfection.

Forts are very numerous on the mountains bounding the upper and middle Rhine, and of these at least one, the promontory fort of Rambach near Wiesbaden, has been dated to the 8th century B.C.[2] The date seems to rest to a large extent on association with a group of barrows: if correct, it is remarkably early, for the bulk of the German Hallstatt forts seem to be later, and this one is distinguished by having an inturned entrance clearly set intentionally askew, and is thus of a rather advanced type. However, its Hallstatt date is beyond question, and quite a number of German and French forts are reliably attributed to the 7th and 6th centuries, or Hallstatt II period.

1. *e.g.* the Camp de Chassey (Saône et Loire, France), Déchelette, *Manuel* III, p. 188, and Fort Harrouard (Eure et Loir), with vitrified rampart of Middle Neolithic date: *B.S.P.F.* XXV, p. 368 ff.

2. Thomas in *Annalen des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, 42 (1913), p. 138 ff.

In Swabia, the Heunenburg near Riedlingen [1] has fortifications of two periods dating from these centuries, and pottery of the latter has been found at the Heuneburg near Upflamör [2] and in the earliest period at Lemberg near Feuerbach,[3] in the same region. The fortress at Koberstadt, already mentioned (see p. 70 above, with ref.), is of a similar age, and its entrance was flanked by inward returns of its outer palisade of thornhurdling.

At Neuhausel in the Westerwald [4] is another contemporary fortress, which had, as well as a smaller type of defended entrance, a large one with symmetrical timber defences of some complexity. The famous stronghold of the Steinsburg in Saxony [5] has an inner ring of rampart dated to the 7th century, while the earlier of the subsequent sets of defences may perhaps belong to the 6th. Entrances set askew and defended by a transverse inner wall are here recorded: the inturned type is not present in any way of these works, but in addition to Rambach, mentioned above, a quadrangular walled entrenchment has been excavated at Lipporn in the Taunus,[6] where the rampart-ends are inturned at right angles to flank the entrance for a good 25 ft., and while later material is also present, a fair proportion of Hallstatt pottery was found. In eastern France, inturned entrances seem to be later, but the vitrified Camp d'Affrique, Meurthe-et-Moselle,[7] may be noted as of Hallstatt date, and the same may be said of the Camp de Cora, Yonne; [8] at the Camp du Château, Jura, the original defences seem to be 6th century, if they may be correlated with the adjoining stratum containing Attic black-figure vases.[9] The vitrified fortress of l'Impernal has been mentioned above (p. 65, note 1): another late Hallstatt fortification is that of the important settlement of Haulzy in Champagne:[10] the entrance here was protected by an outer transverse rampart.

Though around the mouth of the Rhône the founding of Massilia seems to have stimulated the fortification of the neigh-

1. Bersu in *Fundberichte aus Schwaben*, n.f. I (1922), pp. 46-60.
2. Veeck *ibid.*, p. 45.
3. Goessler *ibid.* XVI (1908), pp. 34-41.
4. Soldan in *Nassauische Annalen* XXXII (1901), esp. taf. III - VI.
5. Götze in *P.Z.* XIII (1921), pp. 19-83.
6. Brenner in *Nassauische Heimatblätter* 17, ii (July 1913), p. 33 ff.
7. Beaupré in *B.S.P.F.* VI (1909), pp. 381-3: Déchelette, *Manuel* III, pp. 199, 200.
8. Déchelette, *Manuel* III, p. 188.
9. *Ibid.*, pp. 184-7.
10. Goury, *L'Enceinte d'Haulzy et sa Nécropole*, fig. 4 and cols. 7-15. For chronology see below, p. 153.

bouring Ligurian settlements in the 6th century,[1] it is clearly in the Celtic area of Western Europe that fort building was especially prevalent in the later Hallstatt period, and the examples here given are sufficient to show this and establish the fact that entrances, though more normally simple, may be specially defended, and are sometimes, anyhow in Germany, of the inturned type.

Schumacher's distribution-maps[2] show admirably how between the later Hallstatt and La Tène periods the distribution of hill-forts moved northward down the Rhine, and in fact this western Celtic area was now the scene of considerable shifting of population. Celts were established as far north as the lower Rhine, and in this region was felt the first pressure of the Germanic peoples advancing from the north and the east, where they were responsible for such earth and timber fortresses as the Römerschänze near Potsdam, mentioned above (see p. 70). Archaeology records an overlap of the two cultures on the lower Rhine, and it is with this and the rest of the north-western Celtic quarter that late Hallstatt immigration into Britain is to be connected, as will be suggested in a later section (see pp. 152-3 below). Whatever the exact course of events, immigrants at this time cannot fail to have been familiar with the practice of erecting hill-forts, though during the period of their gradual penetration and settlement in small bands they are not likely at first to have made much use of it. But a certain number of hill-forts belonging to what may be broadly termed the All Cannings Cross culture in Southern Britain are definitely attested.

They consist as a rule of a single main rampart and ditch, though the stone-built fort of Chastleton in the Cotswolds, now being excavated by Mr. E. T. Leeds, is ditchless. As with the Hallstatt forts which we have been considering on the Continent, their entrances are normally of simple type, consisting merely of a break in the earthworks, which figures as Type A in the left-hand column of Fig. 8, a comparative chart of the entrances of representative dated hill-forts in Britain. Here the top row (Nos. 1-3) are of the All Cannings Cross period, and the Type A Example (No. 1), Figsbury Rings, Wilts,[3] shows a simple entrance where even the outer ditch is not present on both sides, a " quarry ditch " inside the fort having apparently been

1. Déchelette, *Manuel* IV, p. 503.
2. *S.K.R.* I, taf. 8.
3. Cunnington in *W.A.M.* XLIII, pp. 48-58 : *Wessex from the Air*, pp. 84-86.

used to get most of the material for the rampart—this is an unusual feature.

At Lidbury Camp, Wilts,[1] the entrance was originally a simple gap in the rampart and ditch, and the outline of the ditch at this period is shown by broken lines in No. 2. Subsequently, however, the plan was altered, and the earthworks were thrown forward on both sides, more especially on the east, where the rampart, running over the former ditch, makes a pronounced elbow with a faint curve inwards towards the entrance. Both periods of work belong to the same occupation, and the object of the alteration is clearly to get a better command of the approach. As thus remodelled, therefore, the Lidbury entrance makes the earliest British example of the type here called Type B, where the ramparts are gently incurved on either side of the passage (central column in fig. 8).

The third type of this classification occupies the right hand column in Fig. 8, and has the rampart-ends inturned at an angle approaching 90° to flank the passage. St. Catharine's Hill (No. 3) provides the earliest dated instance of this in Britain. It is further distinguished by the slight skewness of its axis, and by the small counterscarp bank, with splayed double ends, outside the ditch. It need not be repeated that it was stoutly revetted with timber, and at first provided with quadrangular guard-houses set in bays in the rampart on either side of the roadway.

The area of this fort (23 ac.) is also the largest among those known to belong to the same culture. Figsbury is about 15 acres, and the original fort on the northern spur of Hambledon Hill, Dorset, is not very much more. Precision is difficult about the defences of this fort, as it was subsequently enlarged, and it is not certain how much the original earthworks were altered. It is quite possible that they were mainly double from the first, being afterwards made treble: they have been largely formed by scarping the steep hillside. A cross rampart divides the area into two, but the significance of this is doubtful in the absence of excavation (for the earthwork has only been dated by chance finds of pottery in significant positions), and for the same reason it is unwise to discuss the mutilated northern entrance.[2]

1. Cunnington in *W.A.M.* XL, p. 12 ff.

2. The lucid essay by Mr. Eric Gardner in *Wessex from the Air*, pp. 44-55, makes it plain that careful excavation on this site would throw much light on the development of fortification and probably also of the sequence of cultures during the Early Iron Age of Southern Britain.

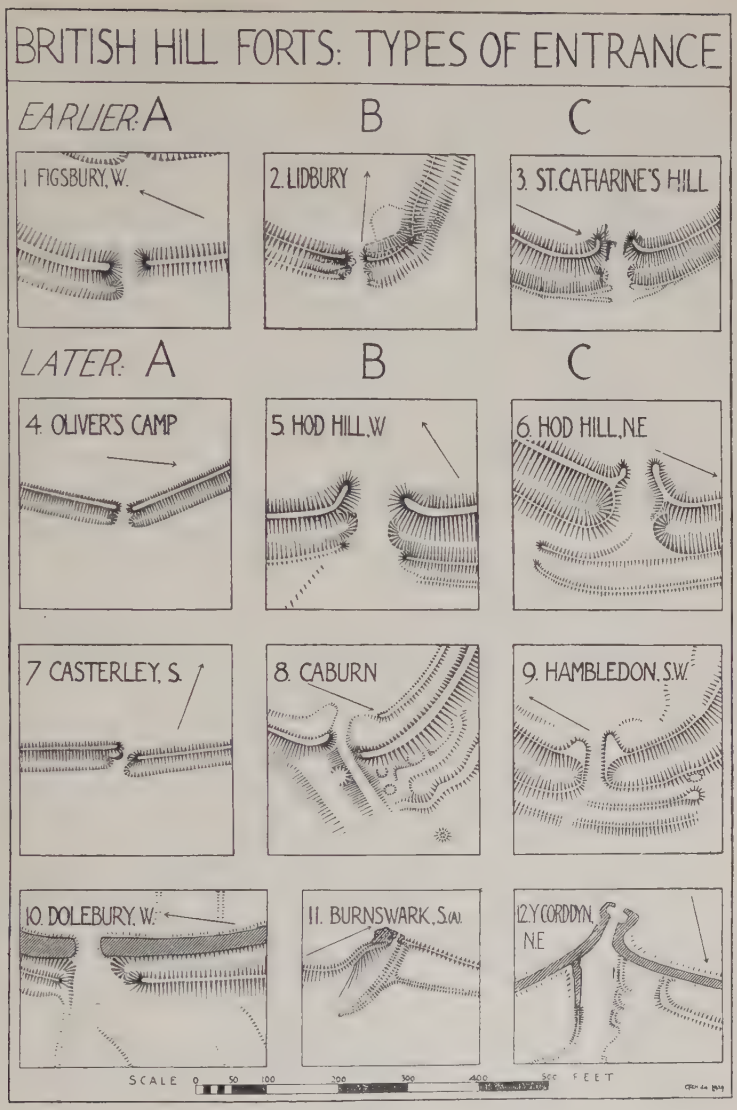

FIG. 8.

NOTE.—The drawings forming this comparative chart are based in every case on plans given by the primary authorities for each quoted in the text, to which further reference is recommended. The arrow marking True North is here in every case *inside* the fortified area.

On St. Roche's Hill, Goodwood, Sussex, the fort called The Trundle (12½ ac.) has defences closely resembling those of St. Catharine's Hill, in particular two sharply-inturned entrances. Though these have not themselves been dated, Dr. Curwen's recent excavations [1] have attested occupation from Hallstatt to La Tène II, and thus the fort is more than any other comparable to St. Catharine's Hill.

Pottery of All Cannings Cross type was found by Pitt-Rivers in Winkelbury Camp, S. Wilts, which has been compared with Hambledon, but hard black wheel-made pottery, evidently of late La Tène date, was also present, and as well as a fair quantity in the ditch, two pieces of it were found in the make-up of the rampart, which is thus seen to be later than the pit-dwellings containing All Cannings Cross pottery.[2] There are other instances of later La Tène fortifications appearing on the site of an undefended settlement of the All Cannings Cross culture (see p. 170 below).

The rest of the earthworks known to belong to the latter are a good deal smaller, and whether or no they occupy a hill-top site, have a noticeably angular outline, as indeed is almost the case at Lidbury.

Liddington Castle, Wilts,[3] is a small promontory fort of 8 acres, approaching quadrilateral form with pronounced corners, the entrance being simple: a quantity of All Cannings Cross pottery is recorded. It is possible that Hollingbury,[4] a squarish hill-top fort of 9.2 acres above Brighton, is of the same date, as within it a pit accidentally opened produced only similar pottery.

Air photography has revealed on Knighton Hill, Wilts, the quadrangular earthwork (about 2¾ ac.) mentioned in Saxon charters as Wuduburh.[5] Dr. Clay's excavations produced All Cannings Cross types of pottery, and the earthwork is certainly a product of this culture, the Romano-British pottery found in the ditch being considerably nearer the surface. It is not a hill-fort, but belongs to the class of pastoral "valley-head enclosures" recognised by Mr. H. S. Toms in Sussex and Dorset. A link with the Rhineland is provided by the strong resemblance of these enclosures to the "Viereckschänze" well

1. *Suss. Arch. Coll.* LXX, p. 33 ff.
2. Pitt-Rivers, *Excavations* II, p. 233 ff., esp. p. 245. This point is overlooked by Gardner *loc. cit.* and Mrs. Cunnington, *All Cannings Cross*, pp. 196-7.
3. Passmore in *W.A.M.* XXXVIII, p. 576 ff.
4. Toms in *Brighton and Hove Archaeologist* I (1914), p. 12 ff.
5. Clay in *Wessex from the Air*, p. 131 ff.

known there, and usually found to be of La Tène date,[1] though, as we have seen, that at Lipporn in the Taunus, notable for its inturned entrance, may be Hallstatt. The "agrarian-military" character attributed to them by the Germans may be said to fit the corresponding British earthworks: the entrances of this common type are, as at Wuduburh, normally simple. A further point of interest is provided by the small square earthwork (about .3 ac.) just outside Wuduburh, and plainly contemporary, as this may be classed with those excavated by Pitt-Rivers at South Lodge (Rushmore Park), on Handley Hill, and on Martin Down, respectively $\frac{3}{4}$, $\frac{1}{4}$ and 2 acres.[2] These belong to the Barrel-urn culture of the late Bronze Age, which is at least fairly closely related to that of All Cannings Cross, and being evidently pastoral enclosures, are naturally without special entrance defences.

This concludes the description of the known fortifications and enclosures of the All Cannings Cross culture in southern Britain, which lasted well into the La Tène period: their scheme was normally simple, but additional defences and the device of the inturned entrance were not unknown.

No such early works have as yet been attributed to the Celts who appeared in Yorkshire probably near the end of La Tène I, and the next development must be looked for in the west.

In the report on his excavations at Chun Castle, Cornwall (*Archaeologia* 76, p. 205 ff.), Mr. E. T. Leeds has drawn attention to the close connexion, especially in La Tène times, between south-western Britain and northern Spain. He points out that the arrival of the Celts in north-west Spain can only have antedated by a short space their arrival in Britain,[3] and a further close link was provided by the important trade in tin. The hill-forts in this area and in northern Portugal, called *citanias* or *castros*, are of La Tène date: they are massive stone ring-works, often of polygonal masonry, with circular stone dwellings inside.

Briteiros, Sabroso, Sta. Tecla, and Pontevedra are the best-known examples,[4] and in these we may see the work of Celtic invaders who had here reached the Atlantic seaboard

1. Behn, *R.V.*, "*Festung*," Sect. 28.
2. *Excavations*, IV.
3. See pp. 153, 159 below. The two movements may in fact be considered practically contemporary.
4. Cartailhac, *Les Ages préhistoriques dans l'Espagne et dans le Portugal*, p. 272 ff.

by a south-westerly movement across France, and thus established their hold over the natives and over the exploitation especially of tin.

Now the stone hill-forts of the very similar tin-producing region of Cornwall are in general smaller, and it is in distribution rather than wholly in type that they correspond to those of north-west Spain, but the connexion between the two groups can hardly be doubted, in view anyhow of Mr. Leeds' further arguments, especially from brooches and from decorative design on pottery, and there is certainly a strong case for the Spanish origin of a Celtic invasion of Britain from the south-west, apparently at some date before the middle of the La Tène period. The fort at Chun is circular and, though small, of great strength: it has two concentric walls, and a double turn is necessary to pass from the outer entrance to the inner, which is of the inturned type. Forts such as this, Trencrom, and Carn Brea, are thickly distributed in the tin area of Cornwall, and from here the culture can be shewn to spread over Devon, Somerset and beyond. With its most interesting manifestations, the lake-villages of Meare and Glastonbury, we are not here concerned, but the pottery-types from them and, for instance, the cave of Wookey Hole are distinctive, and by this means the chronology and extent of the culture will no doubt in time be established. The big hill-forts of south-west Britain seem to be largely La Tène III, and during that period (1st century B.C.) there were fresh immigrations of Belgic peoples from Gaul all along the south of the island as far west as Somerset. It is possible that in the future evidence will be found on which to attribute many later La Tène fortresses to one or other group; but at present it is quite enough that the earlier work of the All Cannings Cross culture (Nos. 1-3: 'earlier' on Fig. 8) may be distinguished from all of them alike (Nos. 4-12: 'later' *ibid.*).

Before these latter can be further considered we must return to the Celtic area of France and Germany. La Tène hill-forts there, as indeed we should expect, are not by any means confined to La Tène III. The continuity in fort-building with the later Hallstatt period is unbroken. From the middle Rhine eastwards to Thuringia and Saxony, the marches of German and Celt are marked by many strongholds,[1] the greatest of which is the Steinsburg, where the Hallstatt defences already mentioned

1. Götze in *P.Z.* XIII (1921), pp. 25-6: Behn in *R.V.* "Festung," Sect. 27.

were superseded before the middle La Tène period was over by two successive sets of new and far larger fortifications, with improved entrance defences. The works at Altkönig in the Taunus, with inturned type of entrance and *murus gallicus* construction, date from La Tène I: those of Heiligenberg are also early, those of Odilienberg middle La Tène, as perhaps are those of Heidenlocher near Deidesheim. Long lists of examples are not required:[1] it is clear that largely under Germanic pressure Celtic fortification was here developing well beyond the point it had reached at the time of the appearance of the All Cannings Cross culture in Britain.

In France, the existence of many forts before La Tène III may be considered certain, but the invasion of the Cimbri and Teutones shortly before 100 B.C. seems to have given fortress-building a new stimulus.[2]

This brings us to the period of La Tène III, when it thus reached its climax throughout Celtic lands. Mediterranean influence intensified town life, and both old and new *oppida* were elaborately fortified. The multiplication of lines of defences and the protection of entrances with outworks are now typical, while the old device of the inturned entrance was brought into greater prominence. The great *oppidum* of Mont Beuvray gives a striking instance of this,[3] while other examples that may be cited are the Château de Muret (Aisne),[4] and (in south-west Germany) Otzenhausen, Heidenlocher, Ringskopf, Wildenburg, Donnersberg, Finsterlohr, and the Heidetränksperre.[5] At Altehöfe in Nassau an inturned entrance was substituted for a simple one.[6]

It is the intensive work of this period in Western European fortification with which Dr. Wheeler rightly connects the contemporary and later work in Britain. But just as the former was preceded by some centuries of prior development, so the latter displays characteristics foreshadowed in the earlier period of the British Iron Age. In particular the inturned entrance

1. For Germany see further, besides *R.V.* "Festung," Sect. 21 ff., Schumacher *S.K.R.* I, p. 131 ff.

2. Déchelette, *Manuel* IV, p. 453. *cf.* Caesar, *B.G.* VII, 77, 12-14.

3. Bulliot's *Fouilles du Mont Beuvray* gives no plan of this: I am indebted to Dr. R. E. M. Wheeler for information, and a sketch-plan.

4. Vauvillé in *B.S.P.F.* IV (1907), pp. 450-1. For a list of representative La Tène III *oppida* in France, see Déchelette *Manuel* IV, pp. 452-75.

5. Behn's article "*Prähistorische Festungstore*" in *P.Z.* XI (1919), pp. 102-117, gives a good account of the entrance defences of German forts of this period in the course of a conspectus of development in this regard from Neolithic times to the Middle Ages.

6. Thomas in *Nassauische Annalen* XXXVI (1906): plan, taf. VI.

is not a new feature in La Tène III, though it is much commoner and more evolved. Rather it is increase in the size of fortifications generally, multiplication of lines of defence, and complexity of outworks, especially those defending entrances, that characterise more properly the work of this period. Allcroft's *Earthwork of England* (p. 187 ff.) and Christison's *Early Fortifications in Scotland* (p. 215 ff.) give general consideration to the variations of these complexities, mostly from surface inspection.

The later examples of defended entrances given in Fig. 8 (Nos. 4-12) are all dated in some degree by excavation, the latest being No. 12, and are grouped according to the same typology as that used for Nos. 1-3, to shew at once its continuance and its development. The left-hand column shews that the simple type A in no way died out: Oliver's Camp, near Devizes [1] and the large camp at Casterley, Wilts,[2] Nos. 4 and 7, are selected because excavation has revealed a system of post-holes in these entrances comparable to, though much less complex than, that at St. Catharine's Hill.

It is probable that careful digging would reveal something of the kind in all fort-entrances: gates were probably usual, and revetments, if not guard-house bays, might well be expected. There is every reason why the rule attested in the former Note of the rarity of heavy timberwork extending along the lines of fortification should not be true of entrances, and it is much to be hoped that future excavators will not neglect this important feature of hill-fort defences.

The more or less gently incurved type B is seen to persist in an improved form with the frequent addition of outworks: those at the west gate of Hod Hill, Dorset [3] (No. 5) are not much more complex than those at St. Catharine's Hill, but at the Caburn, near Lewes, Sussex (No. 8), they are a good deal more so. This fort has two lines of rampart, of which it has already been noted that Lane-Fox (Pitt-Rivers) considered the outer to be later than the inner, which is by itself apparently of the earlier period: anyhow the entrance in its complicated later form must be of La Tène III date.[4]

Fully inturned entrances of Type C are here represented by the north-east gate of Hod Hill (No. 6), where not only does a bank run right round the outer lip of the ditch, but a double

1. Cunnington in *W.A.M.* XXXV, p. 408 ff.
2. Cunnington *ibid.* XXXVIII, p. 53 ff.
3. Crawford, *Wessex from the Air*, p. 36 ff.
4. See above, p. 68, with ref. to Lane-Fox: Curwen in *Sussex Arch. Coll.* LXVIII, pl. I.

outer bank, in type a special development of the St. Catharine's Hill counterscarp bank, passes right across the approach to protect it and necessitate entering from the south and making a right-angle turn: the inturned ends of the main rampart have clearly been designed to conform with this plan. A similar scheme reversed is seen in the south-west gate of Hambledon Hill, Dorset (No. 9), which belongs to this fort's later period (see above, p. 76 with ref.): the cut across the protecting outer banks is modern, and the entrance to the proper lateral approach which they flank is narrowed by thickening them. The defences here are an improvement on those at Hod Hill in that an assailant would expose his shieldless right side to fire from the main rampart.

In conclusion, three examples are given from forts partly or wholly stone-built. Dolebury, Somerset,[1] (No. 10), shews an entrance through works of enormous size which is of simple type, though guarded by outworks, necessitating an inclined approach by a natural gully, the full extent of which cannot be seen on this small plan. Similar advantage of contours has been taken at the fortress of Burnswark, Dumfriesshire, in the approach to the southern gate called A by the excavators.[2] This example, though from rather far afield, is interesting as shewing analogous design in the Scottish Lowlands, and from the fact that the place was assailed, as is clear from the remains of their camps, by the Romans, and very probably by Agricola.[3] The main rampart, following the top of a steep natural bank, curves inwards to flank the narrow approach on one side, while on the other a double outwork runs along it. The gate itself, supported on the south-west by a big outcrop of rock, is stone-built, with shallow bays on either side of the passage (No. 11).

Lastly, on the other outer limit of the Roman power, the fortress of Pen-y-Corddyn,[4] North Wales, gives an example (No. 12) of the extreme development of the inturned type of entrance in the later Roman period. The general problem presented by the Welsh hill-forts of this date is discussed by Dr. Wheeler in the paper already quoted: their existence is probably due to a special adaptation of Roman frontier policy in dealing with the subject native. In the north-east Y Corddyn

1. Dymond in *J.B.A.A.* XXXVIII, pp. 404-5: Allcroft, *Earthwork of England*, p. 686, fig. 224: *V.C.H.* Somerset II, p. 488.

2. *P.S.A. Scot.* XXXIII, p. 232 ff.

3. Tacitus, *Agricola*, ed. Furneaux and Anderson (1922), pp. lii, lviii, with reff.

4. Willoughby Gardner in *Arch. Cambr.*, Dec. 1926, pp. 251, 271, 274 especially. The whole paper is invaluable for the Welsh forts generally.

entrance we have a great depth of outworks flanking an approach up a natural gully, and sharply inturned rampart-ends containing rectangular bays which, while they suggest an imitation of a Roman gate-plan, also recall the guard-house bays of the St. Catharine's Hill entrance.

The general conclusions of this Note may be summarized as follows :—

(1) The building of hill-forts, while not unknown previously, first became prevalent in Western Europe in the Hallstatt period. Pastoral enclosures also occur.

(2) Entrances of inturned type sometimes occur as early as this.

(3) Both (1) and (2) apply to the period of the All Cannings Cross culture in S. Britain, as is natural in view of its Continental origin.

(4) Development of the art of fortification continued on the Continent through the early and middle La Tène periods, and examples in S.W. Britain occur due perhaps to immigration from N. Spain.

(5) The growth of town-life on the one hand, and the increasing pressure of Germanic hostility on the other, gave a great impulse to fortification in the La Tène III period.

(6) This impulse was communicated to Britain.

(7) The characteristics of the work of this period are an increase and improvement in the use of the inturned type of entrance already known, an increase in the size and number of lines of defence, and an increase in the extent and complexity of outworks, especially those guarding entrances.

(8) Owing to special circumstances, an extreme development of such fortifications, especially of the inturned entrance, occurred in the later Roman period in Wales.

Forts situated on hill-tops have been the subject of this Note, but there are signs that woodland and valley settlements were on the increase towards the end of the La Tène period, anyhow in those areas of northern Gaul and southern Britain where the Belgic inhabitants were of mixed Celtic and Germanic stock. Discussion of this tendency will be found more relevant in a later part of this Report (see below, pp. 172 ff.).

THE EARLY IRON AGE PITS

(Fig. 9 and Plate VIII.)

As may be seen from the general map (Fig. 35), the pits on St. Catharine's Hill fall into two classes, which are distinguished for the purposes of this report by letters and numbers respectively.

The first class, which is lettered from A to Z, includes the larger prehistoric pits, with which alone this section deals. Thirteen of them were excavated. Of these M, V and T are situated in the Entrance area and have been described in the section dealing with it. The remaining ten all lie, as may be seen from Fig. 36, on the comparatively level ground in the north-east part of the enclosure, and mostly between the Clump and the Entrance. It is probable that further trenching would reveal more pits in this neighbourhood, for while all the spots with any surface indications have been examined, many of those discovered had no such indications at all, and in some cases must have been deliberately filled up in prehistoric times. The grass is normally too thick for the method of sounding with a heavy rammer to be used with advantage in their discovery, and further pits could only be located by accident or by clearing the surface soil over the whole area. In the latter case it is not probable that the expense would be justified by the results to be obtained. Moreover the most favourable site is occupied by the Maze, and popular sentiment is not likely to tolerate interference with it without good reason.

There is reason to believe that the number of pit-dwellings discovered in this area is not due simply to the fact that it has been more thoroughly examined than other parts of the Hill. As can be seen from Fig. 36, a large number of trial holes were made north of Pits X and W where slight depressions or luxuriant grass aroused suspicion, but in no case was there any trace of human habitation, and the soil was uniformly clean, and almost entirely free from fragments of pottery and even from animal bones. To the south-east, again, two trial holes near Section 1 across the defensive system showed no sign of occupation, and, as has been pointed out on p. 17, it is probably not without significance that, whereas the old subsoil under the bank in the neighbourhood of the Entrance produced a considerable quantity of pottery, not a single sherd was found in any part of Section 1. Plainly there was little or no habitation

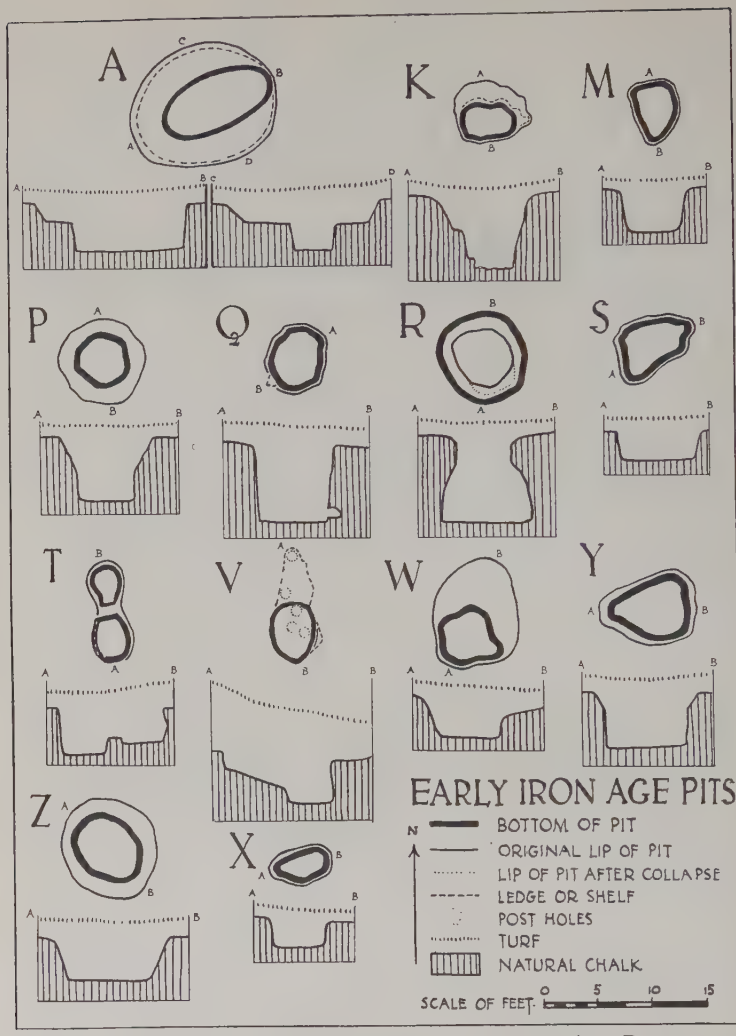

Fig. 9. Plans and Sections of Early Iron Age Pits.

in this neighbourhood. Similarly a trial hole some 400 yards south of the Chapel site showed perfectly clean subsoil and produced no pottery or bones at all. On the other hand, surface pottery of prehistoric date is common all over the Chapel site, and to the west and north-west of it, in the neighbourhood of Ditch 2 and of the mediaeval Pit N, and we are led

to the conclusion that the main Early Iron Age occupation area lay roughly between Pits X and W on the north, Pits A and S on the south, the Entrance and adjacent Rampart on the east and a rather indefinite line not far outside Ditch 2 on the west. This area was on all grounds a natural one to choose for intensive occupation. It is the highest, driest, and most level part of the fortified enclosure. It lies between the only Entrance and the top of the Hill. It is the least exposed to the prevalent and rainy south-west winds, and it commands the most extensive outlook in almost every direction.

The pits which have been excavated vary considerably in size and character. Most are oval in shape and have sides either vertical or but slightly tapering inwards towards the bottom. One (Pit R), the biggest, is of beehive type with overhanging walls and the area of the floor larger than that of the mouth.[1] In no case were post-holes found in the floor or elsewhere to give a clue to the construction of the roof, and daub with marks of wattle occurred in only one pit. Some instances of a rough ledge round one or more sides were seen. Floors were found in only two cases, of trodden sand with traces of fire in Pit A and of large flints puddled in chalk in Pit R. In neither case was there more than a single floor. The filling of the pits varied in quality. It consisted in general of chalk rubble with greater or less intermixture of earth, charcoal, animal bones, and fragments of pottery. In some cases the filling was of chalk rubble so clean that the pit must have been deliberately filled up. In others, too, fragments of the same pot found on the floor of the pit and in the surface soil many feet above suggested that the whole filling was contemporaneous and not the effect of slow accumulation. In most cases the rarity of pottery and other objects pointed to the same conclusion. It is remarkable, for instance, that a rib-knife and some fragments of antler were the only objects of worked bone or horn that were found in the pits and that not a single object of metal came from any of them. With one or two exceptions more pottery was found in the surface soil over the pits than in the pits themselves, a fact which again suggests deliberate filling before the end of the occupation.

The purpose for which the pits were dug is in many cases uncertain. Pits A and R with their floors and fires and abundant

1. Dr. Clay gives a restoration of this type of pit from evidence found at Fifield Bavant: *W.A.M.* XLII, p. 457 ff., with pl. I.

pottery were certainly inhabited. Pit X was as certainly used for rubbish. But the others have less obvious indications, and those which have no floors and show no traces of the dirt and fires of human occupation, such as Pit Q, may well have been dug simply for storage.

PIT A (Plate VIII, 1) is a long oval in shape surrounded on three sides with a ledge or step three or four feet in width with somewhat sloping sides cut about two feet into the chalk, the floor of the pit itself being 5 ft. 6 ins. deep. Such ledges are a common feature of prehistoric pits and may have served in place of tables, chairs or shelves, or simply to facilitate egress. This pit was certainly used for habitation. The lower parts of its walls were discoloured by fire, and the floor was covered with six inches of trodden sand with traces of charcoal and other indications of burning. There was no regular hearth, and the fires must have been lit when required at any point on the floor. In the sand of which the floor was composed was a group of pottery, illustrated on fig. 10, which has importance as the only group of strictly stratified pottery from any of the pits, for it can only have reached its position during the occupation of the pit and before the filling had accumulated after its disuse. It includes A 1, part of a globular pot with high plain slightly everted rim, of very hard fine burnished orange red paste, parallel both in form and colour to the Hallstatt pottery from Park Brow, and A 3, which with its raised knobs has close parallels at All Cannings Cross probably not much later in date. The other fragments are not so strictly datable, though the wide flat-topped rim (A 2) looks early too, and the bucket-shaped vessel (A 5) is of a type common in both Hallstatt and La Tène I periods. The group as a whole is thus markedly early, and the pit may be considered one of those in use before the construction of the fortifications, which, as has been pointed out on p. 21, were built not earlier than La Tène I to enclose a pre-existent settlement. The pit moreover was probably abandoned at an early date, for its filling, which was fairly homogeneous earthy chalk rubble, contained several hundred fragments of rough pottery, amongst which were numerous rims and shoulders ornamented with finger-print and cabled decoration. Among those illustrated (fig. 11) are A 113, with cabled rim, and A 106, grooved rim with finger-prints on the edge: there are also (fig. 12) A 102, irregular rim, and A 133, uneven flat-topped rim with faint diagonal lines on the

PLATE VIII

1. Pit A from West, shewing ledge.
2. Pit T from South, shewing hour-glass form.
3. Pit P from West. The inside of the Rampart is seen in the background.
4. Pit R from South. The measuring pole is standing vertically, shewing the bee-hive form of the pit.

exterior surface ; all of these are of early type. None of the fragments from the filling need in fact be later than La Tène I, and its silty quality, the abundant pottery in it and the fact that the pit is still marked by a pronounced depression in the modern surface all suggest that it was not deliberately filled in, but that after its disuse the present contents accumulated gradually, partly from natural causes and partly from the pit being used for the dumping of refuse by neighbouring families. Bones of ox, pig, sheep or goat, and perhaps red deer, were present.

PIT B is itself a small mediaeval sand or mortar pit of the same type as C and others in its vicinity. Close to its western edge, however, was found a deposit of animal bones, two fragments of sawn red-deer antler, and the rim and shoulder of the remarkable pot illustrated fig. 10. This deposit probably represents a rubbish heap from Pit A or some undiscovered pit in the neighbourhood.

PIT K is roughly oval in shape—with floor dimensions 3 ft. 6 ins. by 5 ft. 3 ins. It is $7\frac{1}{2}$ feet deep from the normal level of the undisturbed chalk. The walls are more roughly hewn than in most pits, especially near the bottom, where on one side a rough ledge has been left about a foot above the floor. The upper part of the same wall has also been cut back to form an irregular step or shelf, which may have been intended to assist descent. At one end on the floor level two or three pot-boilers were found in a natural fissure in the chalk wall which provided a sort of cupboard, but this was the only sign of habitation. There was no laid floor and little sign of burning on the walls. The filling contained about 80 shards of coarse pottery, including K 1 (fig. 12) part of a straight flat-topped rim with faint linear ornament, three shoulder fragments with finger-print decoration K 4 (fig. 11) and K 7 (fig. 14), a fragment of black polished ware from the rim of a pot with a sharply carinated shoulder, which is important as an example of the very uncommon class of La Tène I pottery known as Hengistbury B. It came from fairly high in the filling, about $2\frac{1}{2}$ feet from present surface. Well below it, at a depth of about $4\frac{1}{2}$ feet, were found the fragmentary remains of the three oxen described p. 136. The lower part of the back and hind legs of one lay upside down against the west end of the pit : the skull and six adjoining vertebrae of another lay partly above it, and a further group of vertebrae lay on the northern wall, while other fragments lay indiscriminately in every direction. It was clear that the

pit, which from the character of the pottery in its filling was probably abandoned fairly early in the occupation, had been used when half full for the disposal of parts of these animals and had then been filled up, for above the dark stratum connected with the bones the chalk rubble was fairly clean, and only the slightest depression in the modern surface indicated the site. The rest of the filling contained other bones of ox, and of horse, pig, and sheep or goat.

PIT P (Plate VIII, 3) is roughly circular in shape, 7 ft. deep, with a floor space 5½ ft. across. Its walls were vertical in the lower half and splayed outwards above, but this feature may be due to erosion and disintegration either during the use of the pit or subsequently. There was nothing on the floor but a little dark silt, and apart from the usual flecks of charcoal the filling consisted of practically clean chalk rubble. It contained, however, fairly abundant animal bones but only about 30 fragments of pottery; one showed a finger-print rim and another (P 1, fig. 12) a flat-topped rim of a straight-necked vessel of dark sandy ware. There were also bones of ox, horse, and sheep or goat. The indications here are too slight to justify a guess as to the date or purpose of the pit, but its comparatively clean and homogeneous filling and the almost complete absence of surface indications suggest strongly that it was deliberately filled up after abandonment.

PIT Q adjoins Pit P, and was similar to it though somewhat larger. Roughly circular in shape, its floor had a diameter of 6½ ft., and was 7½ ft. below the surface of the hard chalk and 9 ft. below the modern surface. Since the sides were practically vertical the pit could only have been entered by some kind of ladder. A few marks which might have been made with a deer-horn pick were noticed on the hard sides, and a small recess in the southern wall at floor level may have served, as did that in Pit K, as a cupboard, though here nothing was found in it. The filling was similar to that of Pit P, clean chalk rubble with a little silt on the floor, some flecks of charcoal and fairly abundant bones of ox, horse, and sheep or goat. Pig was also present on the floor. About one hundred fragments of pottery were found, but the greater part came from the surface soil and have therefore no direct connection with the pit itself. This applies especially to Q 1 (fig. 12), part of the rim and side of a heavy grey pot with plain rim and swollen body, and to Q 2 (fig. 10), the lower part of a somewhat larger pot of similar type.

There were also fragments of a rim similar to P 1, of a small rim with cable pattern, of a slightly beaded rim of a small grey-brown shouldered pot, and of a plain buff sandy pot. This pit, like Pit P, was probably deliberately filled up in prehistoric times.

PIT R (Plate VIII, 4) is the largest and best preserved of the pits excavated, and may confidently be described as intended for habitation. It is of beehive form with overhanging sides providing an aperture of about $5\frac{1}{4}$ by 6 ft. and a floor space of $8\frac{1}{2}$ by 9 ft. at a depth of 9 ft. from the present surface. On the south side the wall is at present vertical, but this is certainly due to disintegration of the overhanging portion after the disuse of the pit, the clean chalk of the fallen wall on this side being easily distinguishable from the earthy chalk rubble of the rest of the filling. The floor was covered with very large rough flints, some more than a foot across, the interstices between them being filled with puddled chalk. Discoloration on one side may have been due to a fire, but there was no regular hearth. The chalk rubble filling was abnormally dirty, and contained a good deal of charred wood, mostly from small sticks, but animal bones (ox, horse, and pig) were not very frequent. There were a few small fragments of clay impressed with wattle marks, which may have come from the roof or walls. Pottery throughout the filling was especially abundant, several hundreds of fragments being found, and they included many of the most perfect examples from the site (fig. 14). It is significant that in many cases the fragments had been severely burnt after the pots in question had been broken. Thus adjacent parts of the same vessel vary sharply in colour along the lines of present fracture from glossy black to a light brick red or chocolate brown. This was especially noticeable in the case of highly burnished pots such as R 1, R 2, R 10. The pottery came from all levels in the pit, and the contemporaneity of the whole filling is indicated by the fact that fragments of the same vessel were found in the surface soil and on the floor of the pit many feet below. There is therefore no reason to doubt that the pottery is all of approximately the same date, and it is very probable that it was shovelled into the pit on its abandonment from a rubbish-heap in the near neighbourhood, which was probably that of Pit R itself.

Another rubbish-heap which can be directly related to Pit R and its contents was happily found more than 50 yards away in the hollow formed by the scraping of the surface soil for the

building of the main rampart just south of the point where it turns inwards to flank the entrance roadway. In the angle behind the curving rampart and enclosed by it on two sides was a mass of pottery lying in the surface soil over an area of about 400 sq. ft. Among the shards was one which came from a highly burnished black vessel (R 3), of which the remaining pieces had been found close together near the bottom of Pit R. The fragment from the rubbish-heap, which for convenience is referred to as the Area in this Report, had lost its burnish, but fitted into its place when the pot was reconstructed, and it provides evidence that the pottery from the Area (fig. 13) can be treated as substantially a contemporary group with that from Pit R (fig. 14).

This fact is of some importance not merely in establishing the date of Pit R, but in throwing additional light on the date of the Rampart and the building of the Entrance defences. For the Area pottery, lying as it does in the hollow formed by the scraping of the surface soil to build the Rampart and the Entrance, can only have reached its position after the construction of the defences, and provides therefore a substantial block of material in connection with that from Pit R which we have seen to be contemporary with it, the whole of which should be subsequent to the date of the fortifications.

A detailed account of the pottery from these two sources will be found below, pp. 113-6, 118-20, and figs. 13 and 14. It is sufficient here to indicate that the evidence for its date is entirely in accord with the conclusions arrived at from the evidence of the Entrance and Rampart themselves, which (pp. 21, 33) we have seen reason to place not earlier than the middle of La Tène I. The bulk of this pottery can be safely attributed to the late La Tène I and earlier La Tène II periods ;[1] it is in fact with the exception of two chance shards the latest pottery of the Early Iron Age which has been found anywhere on St. Catharine's Hill, and that it does not extend into late La Tène II and has no affinities with that of the Belgic period is a fact whose significance is discussed in the section on the origin of Winchester itself (p. 169 ff.).

1. The features chiefly to be noted are (*a*) the bucket-shaped or straight-sided vessels with plain or almost beaded rims and decorated if at all with a zone of shallow horizontal or diagonal grooves, *e.g.* R. 1, AR. 1, 2, 3, 6, 11.
(*b*) The heavy storage vessels with upright or everted rims : R. 5, 7, 8, 10.
(*c*) The dot and line decoration in shallow tooling, *e.g.* R. 10, 17, AR. 7.
(*d*) Almost complete absence of finger-print decoration and pots of the high-shouldered type associated with it.

PIT S is a small pit of irregular shape nearly 8 ft. in greatest breadth, and only $2\frac{3}{4}$ ft. in depth below the normal chalk surface, 4 ft. below present turf. Its walls were roughly vertical, but owing to the softness of the chalk and its consequent disintegration their exact line could be only approximately determined. There was no floor or other indication of habitation. The filling, which was very clean, contained only five shards of pottery, but was remarkable for producing a rib-knife and a group of pieces of deer antler (fig. 15), the raw material perhaps from the bag of some worker in horn and bone. Among the pottery was S 1 (fig. 11), a fragment of the lower part of side and base of a pot of brown gritty ware decorated with incised lines of a type not found elsewhere on the site, and S 2 (fig. 12), a fragment of very coarse ware with a peculiar rim also unique in these excavations: the former at least is probably not of the latest period of the settlement. Bones of ox, pig, and sheep or goat occurred scantily.

PIT W is of irregular quadrilateral form with rounded corners and floor-space about 6 ft. by 6 ft., at a maximum depth below the modern surface of 5 ft. It has sloping walls and on the north side a wide shelving ledge covered with a layer of sand. The pit itself had no floor. The filling, which was noticeably dirty, contained 25 shards of pottery, rather abundant animal bones (ox, horse, pig, and sheep or goat) and at about 18 inches from the bottom a saddle quern of sarsen (fig. 15, 3). Among the pottery fragments was W 3 (fig. 12), a circular counter $\frac{3}{4}$-inch in diameter cut from a sandy dark shard, a small piece of a cabled rim from a red-shouldered pot, a piece of a shoulder from a very abraded coarse brown pot with a line of finger-tip decoration, and three plain rims. A thin layer of charcoal and burnt earth overlaid the filling of the pit close below the present turf, but this must be due to some later fire after the pit was filled and probably forgotten.

PIT X is a small oval pit with floor $3\frac{1}{2}$ ft. below the turf, dimensions 3 ft. by 5 ft., and a depth of only $2\frac{1}{2}$ ft. below the normal surface of the chalk. It was filled with a mass of kitchen refuse, burnt bones of ox, pig, and sheep or goat, etc., and was probably never intended to serve any purpose but that of an incinerator. The contents included about 100 shards of pottery, all of early type, but mostly so small as to make useful reconstructions impossible. They included two fragments showing finger-print decorations on the shoulder of a grey-brown pot, X 5

(fig. 11), to which apparently some 26 other fragments belonged, but none of them joined so as to increase the known shape of the vessel. There were also X 1 (fig. 12), part of the swollen and flattened rim of a heavy dark shallow bowl, two flat-topped straight rims, and parts of the neck of two brown shouldered pots. The whole group suggests an early date for this pit.

PIT Y is roughly triangular in shape with floor area of 6 ft. by nearly 8 ft. at a depth of 5 ft. below the hard chalk surface, $6\frac{1}{2}$ ft. below the turf. The walls sloped inwards in the upper part and became vertical lower down. The filling, floor, and walls of this pit were remarkably clean; it contained only 36 shards of pottery, and ox, horse, pig, and sheep or goat bones in small quantities. It is hard to believe that it could have been in use for any long period, and the cleanness of the filling and the absence of indications of its position on the modern surface suggest that it was deliberately filled up. Among the pottery were rim fragments of two globular pots with narrow mouths (as Y 2, fig. 12), and also Y 1 (*ibid.*), the upper part of a vessel of dark sandy ware with tall slightly everted tapering rim and rounded body. This suggests a decadent form of the Hallstatt type exemplified here by A 1 (p. 97), and is probably of La Tène I date.

PIT Z is a blunt oval in shape, with floor-space 6 ft. by $7\frac{1}{2}$ ft. at a depth of 4 ft. below the normal chalk surface. The walls taper inwards fairly uniformly towards the bottom, and though there was no made-up floor, it seems probable that the pit was occupied for some time. Both walls and floor were very discoloured and the filling was especially dirty. It contained a good deal of charcoal, especially on the west side, animal bones of the same species as in Pit Y, but more numerous, and about 60 shards of pottery. A piece of deer antler from this pit (fig. 15, 4) had apparently been used for testing the sharpness of metal tools, since it was covered with scratches of knives and unfinished saw-cuts apparently quite at random, some being even on the butt end. A cylindrical spindle whorl of chalk was found, and several lumps of clay with plentiful admixture of grit and flint, apparently the raw material of pottery-making accidentally baked by some chance fire. Among the pottery fragments were Z 1, part of neck and shoulder of a high-shouldered vessel of hard dark sandy ware, Z 4 part of the rim and side of a coarse red steep-sided bowl (both fig. 12), and a small fragment of shoulder of a red pot with line of finger-print

decoration. So far as fragments go, they would suggest an early date, but it would be rash to speak definitely on such slight evidence.

It is worth emphasizing again in conclusion of this section that the pits which have been excavated are probably only a small proportion of those which could be discovered by really exhaustive search. Their number is obviously inadequate to account for a population capable of raising the fortifications of the hill. But few as they are, they do appear to cover the whole range of occupation so far as that can be gathered from the use of the Entrance and the fortifications, and their contents, so far as they go, do confirm the conclusions which have already been drawn from the evidence of the defences. Thus in Pit A we have in the floor stratified pottery of definitely Hallstatt affinities, and material in the filling over it which is in every way parallel to that obtained from the old surface soil below the rampart in Section 2, providing additional evidence of habitation which antedates the building of the defences. All the material from the various phases of the Entrance can be paralleled from one or more of the pit-dwellings, and we have finally in Pit R another habitation-site which is contemporary with the last period in the Entrance, and definitely related to the rubbish-heap Area by the discovery of fragments of the same pot in each. And the Area pottery, as we have seen, can only have reached its position well after the defences had been finished. The pottery from the pits is therefore parallel in every stage to that from the Entrance, and the evidence from each provides a coherent story, which the discovery and excavation of additional pits which no doubt exist is unlikely to extend appreciably in either direction.

DITCH 4.

The minor earthworks of the Hill will be seen below (pp. 227-31) to be mediaeval or modern, with one exception. This is Ditch 4 (fig. 36), which produced enough evidence to make it advisable to describe it here as of Early Iron Age date.

It presented a roughly V-shaped section with a flattish bottom (see below, fig. 25, no. 4), having a depth of 4 ft. 4 ins. below the subsoil and a width at the top of about 4 ft. 6 ins. It shows on the modern surface as a depression under 1 ft. deep on the average.

It was found to run in a gentle curve from south-west to north-east; in the former direction the discovery of its end was prevented by the Maze, but in the latter it ran right up against the back of the main rampart some 170 ft. north-west of the Entrance, and there stopped. In the rounded end of the ditch there were found quite a number of featureless shards of coarse pottery of characteristic Early Iron Age type, and some of which were right on the bottom. Mingled with those that were lying in the silt at higher levels were about 10 small fragments of Romano-British pottery, representing at least four different pots, and a few bones of ox and pig.

No other finds were made in this ditch, and there was no recognizable stratification in the earthy chalk silt which filled it, but it is reasonable to believe it was dug during the Early Iron Age occupation and only partially silted up in the Roman period. Its position relative to the pits suggests that it formed a partial boundary to the main inhabited area, and thus it recalls the ditch similarly situated at the contemporary village on Swallowcliffe Down, which resembles it fairly closely in section.[1]

All the actual vestiges of the settlement and its fortifications have now been described as revealed by excavation. The culture of the inhabitants was clearly fairly primitive, and the pit-dwelling may be taken as the typical habitation, as it must certainly have been the typical place of storage. Hut-sites like those excavated at Park Brow near Cissbury, though they are likely to have existed, were not found, and the guard-houses in the Entrance provided the only instances of habitations on the surface level. A clearer notion of the people's degree of civilisation can only be gained by a detailed survey of their pottery and implements.

1. Clay in *W.A.M.* XLIII, pp. 59-93, plates I, II.

THE POTTERY

THE pottery here illustrated (figs. 10-14) has been carefully selected from the large mass discovered as a series fully representative of the types present.

In some respects a continuous development can be traced between early and late types, though the former sometimes persist; a general review of the whole series makes it quite clear that the settlement, undisturbed by external penetration, continued throughout with a homogeneous culture from late Hallstatt to early or middle La Tène II times.

In the following descriptive list, all the pieces will be found which have been mentioned in the description of the excavations as occurring in significant positions, along with as many others as are required to complete the representation of the whole set of types.

Pottery of Hallstatt - La Tène I character was far more abundant than that of La Tène II; the allowance of nearly the whole of figs. 13 and 14 to the latter is disproportionate to its relative quantity, and has been made for the sake of its chronological value.

It has seemed worth while to give references to analagous finds from other sites (see distribution list below, pp. 163 - 8), as the recent tendency to emphasize the local variations of the earlier Iron Age culture of Britain at the expense of its measure of unity has perhaps been carried a little far.

A general essay on the culture represented, its origin and distribution, will be found below (pp. 140 - 161). The typical pottery was first recognised at Hengistbury (classes A and C), and has since become widely known especially through the important discoveries at All Cannings Cross (Wilts), Park Brow (Sussex), and numerous other sites.

1. **Fig. 10.**

(*a*) **Pit A,** Stratified group on floor (p. 88).

A. 1. Part of plain everted rim and bulging side of pot of very hard fine paste, bright orange brown, with ferruginous coating, and some admixture of fine white flint grit: undecorated but burnished inside and out. Another fragment of same pot shews outer surface darker brown, inner dark grey.

Hallstatt type. Eastbourne: *Ant. Journ.* II, no. 4, p. 356, fig. 2.
Ham Hill: Taunton Mus.
Old England: Brentford: *Antiquity* III, no. 9. p. 28, fig. 4, no. 3.
Park Brow: *Arch.* 76, p. 17, fig. 6.
Scarborough: *Arch.* 77, p. 189, fig. 25.

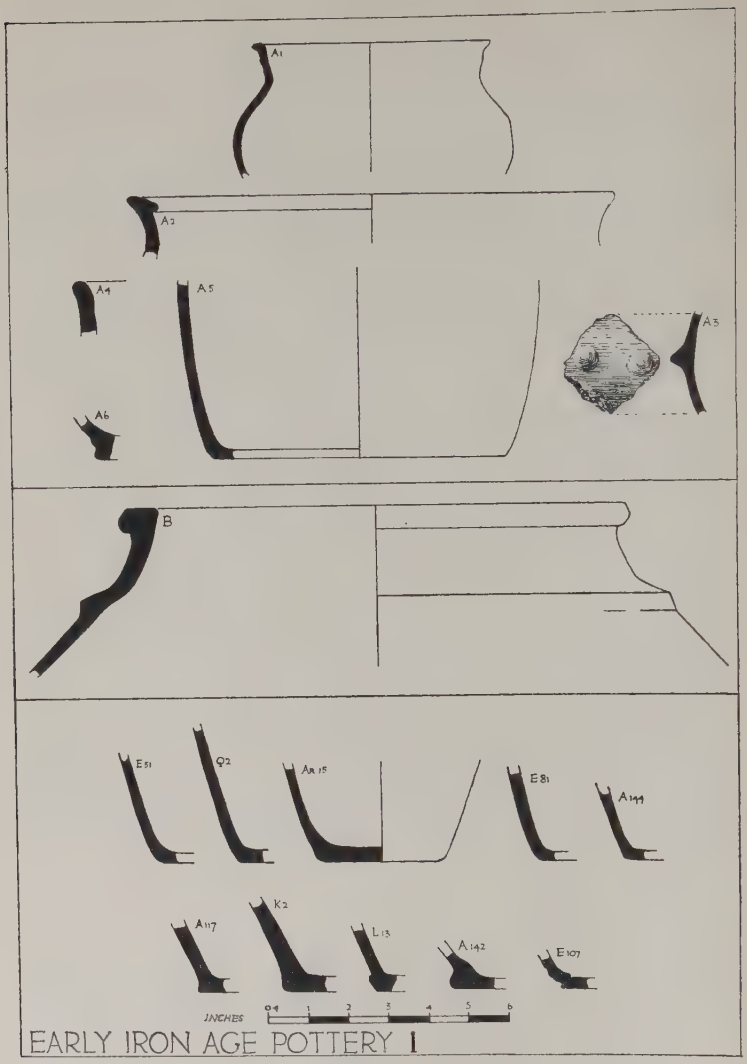

FIG. 10.
Pottery from Pits A and B (pp. 97-9), and typical bases (p. 100).

A. 2. Three rim-fragments of heavy pot of dark grey sandy ware, slightly burnished outside: rim everted and then bent inwards on itself to form a flat top and internal ridge.

Hallstatt type. Hunsbury: Northampton Mus.; similar rim with applied band below.

A. 3. Part of bulging side of pot of sandy paste with much white flint grit: surface brown inside, dark grey outside ornamented with two raised knobs, pinched up, not applied, ½ in. high and 1 in. apart. These are an early Hallstatt - La Tène I feature.

All Cannings Cross: pl. 42, 1.
Fengate, Peterborough: Northampton Mus.
Grime's Graves (early): *G.G. Report*, p. 212, fig. 82.

A. 4. From rim of heavy pot of red sandy ware, rim plain, slightly swollen at top, as Fifield Bavant: *W.A.M.* XLII, pl. VII, 32. Early La Tène.

A. 5. Piece showing base-angle of bucket-shaped pot of dark grey sandy ware, smooth surface, much flint grit. No projecting foot. Hallstatt - La Tène I. Atwick: *Man* 1910, 48.
Scarborough: *Arch.* 77, p. 187, fig. 20.
Swallowcliffe: *W.A.M.* XLIII, pl. IV, nos. 3, 9.

A. 6. Base-fragment with slightly projecting foot; dark grey-brown gritty ware, roughly smoothed surface.
Hallstatt - La Tène I. Park Brow: *Arch.* 76, p. 19, fig. 9.

Other fragments, 14 (small).
For pottery in filling of Pit A, see below.

(*b*) **Pit B,** rubbish-heap on edge of.

B. Part of rim, neck, and broad shoulder of very large pot of hard gritty ware, outer surface dark red-brown, smoothed but not burnished, inner buff; core dark grey, containing fine flint grit. Rim broad, flat top, rounded projecting lip: on shoulder a horizontal raised (not applied) ridge of triangular section, not parallel to the rim, for the pot is mis-shapen. In spite of the heaviness of rim and neck, the side 2 ins. below the ridge is only 3/10 in. thick.

Form as yet unparalleled.

Rim. A heavy flattened rim seems an early Hallstatt - La Tène I feature (see below on E. 124, fig. 12): this is a specialized form of the inevitable outward projection, also resembling the lip of tall pots from Atwick, *Man* 1910, 48, fig. 2 (La Tène I, comparable to Swallowcliffe examples).

Curve of neck and shoulder. Quite in the Hallstatt manner (R. A. Smith in *Arch.* 77, p. 191, with Dutch exx. comparable to Scarborough).

Raised ridge. An applied band in this position on Hallstatt period pottery, as here without the usual finger-print ornament, occurs at Scarborough (no. 78, Arch. 77, p. 184), and at Old England, Brentford, *Antiquity* III, no. 9, p. 28, fig. 4, no. 1: these pots are of similar shape though without projecting rim, and as the contemporary knob-decoration occurs both applied and pinched up, there is no reason why this should not also be true of the band or ridge.

Quality of ware. Though hard, close-grained, and heavy, and free from coarser grit, it is not much in advance of the Scarborough pieces, and its smoothness is paralleled in much unburnished ware of the All Cannings Cross culture.

A Hallstatt - La Tène I date is therefore reasonable, and the piece may be classed with the Pit A floor group.

(*c*) Typical Bases.

E. 51. Coarse dark grey clay, not much grit.
Destruction-rubbish in Entrance, unstratified.

Q. 2. Coarse grey gritty ware. Surface soil over Pit Q.

AR. 15. Bottom of heavy dark brown pot, paste full of white flint grit. Surface much abraded. Area, unstratified.

E. 81. Black gritty ware, smooth surface.
Entrance, S. bank, surface.

A. 144. Coarse clay, outer surface red, inner black. Pit A, filling.
Such bases of pots without projecting foot form a regular Hallstatt - La Tène I type: *e.g.*
Park Brow: *Arch.* 76, p. 19, fig. 8.
Swallowcliffe: *W.A.M.* XLIII, pl. IV, 1. *Cf.* also A. 5 above.

A. 117. Well-moulded base of brown pot with slightly projecting foot, surface well smoothed inside and out.
Pit A, filling.

K. 2. Heavy base (perhaps of K 1, fig. 12), with slightly projecting foot, rather sandy paste, outer surface red, inner dark. Pit K, filling.
Bases of this profile seem more usually early La Tène:
Park Brow, *Arch.* 76, p. 19, fig. 10,
Swallowcliffe, *W.A.M.* XLIII, pl. IV, 2,
but some are dated Hallstatt at Scarborough: *Arch.* 77, p. 187, fig. 21, f, j.

L. 13. Base of pot of coarse brown sandy ware, inner surface grey, with slightly projecting foot of peculiar form. Surface, near Pit N. Perhaps Hallstatt, as at Scarborough: *Arch.* 77, p. 187, fig. 21, g.

A. 142. Base of brown pot, with well-moulded projecting foot. Pit A, filling.
Hengistbury, class C: *Report*, pl. XIX, 1.
Scarborough: *Arch.* 77, p. 187, fig. 21, e.
These are dated respectively La Tène I-II and Hallstatt.

E. 107. Fragment of very coarse pot shewing well-marked joint between side and base. Entrance, filling of Hole 14. Apparently La Tène I in this case—such a joint is often found in pottery of this culture (Mr. G. C. Dunning quotes a close parallel here from Turnford, Herts); it clearly shews that the potter first fashioned a circular slab of paste for the base, and then proceeded to build up the sides.

2. Fig. 11.

Pottery shewing Finger-Print, Punched, and Incised Decoration.

(*a*) Finger-Print Decoration.

E. 126. Straight rim with faint outward projection and flat top decorated by the prints of a small finger-nail: paste black.

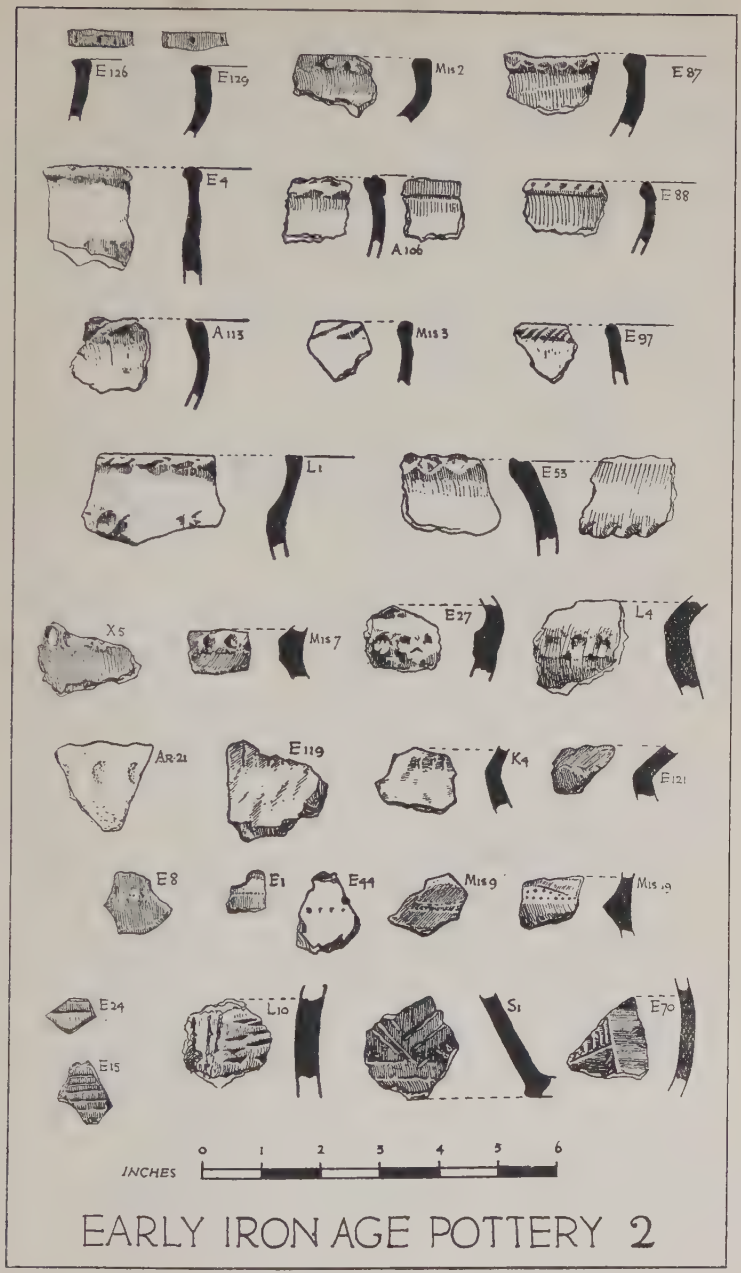

FIG. 11.
Pieces shewing finger-print, punched, and incised decoration (pp. 100-7).

E. 129. Similar, but with larger nail-marks.
Entrance, occupation-layer in S. Bay under dark silt.
Here La Tène I, but such ornament on the top of the rim occurs on Hallstatt-period pots at Grime's Graves also bearing the early feature of an applied band, and on pots with finger-printing on the shoulder too at Hengistbury, class A: *Report*, pl. XVI, 10; also exx. from Wisley in Brit. Mus., one (*Ant. Journ.* IV, no. 1, p. 44, fig. 8) of rather later form (= Hengistbury class C) having it in regular 'pie-crust' pattern. Save for such survivals, it may be called a Hallstatt - La Tène I feature, but seems rare save on the earliest sites.

Mis. 2. Rim of shouldered dark coarse pot: straight, flat top, big finger-print ornament on outer edge. Surface. Similar pot from Walthamstow in Brit. Mus.

E. 87. Roughly-shaped rim of coarse gritty black pot, small close finger-print ornament on outer edge.
Entrance, N. Bank, Surface.
Similar piece from Fengate in Northampton Mus.

E. 4. Roughly-shaped rim with finger-print ornament, and part of nearly straight side of hard black pot, paste free from large grit. Section 2, below old turf-line under Rampart. For profile and ornament *cf.* pots from Walthamstow in Brit. Mus., and Trumpington, Fox, *Arch. Cambr. Reg.* pl. XIV, A. 7: also bucket urns of similar ware from Morgan's Hill, Wilts, and Preshaw (see above, fig. 3 and note, p. 5: also below, p. 168 (*Ant. Journ.* VIII, no. 1, pl. XXII).

A. 106. Rim of smoothish sandy grey pot, light brownish inside: large finger-prints on outer lip, groove on top and below inner lip. Pit A, filling: found with piece of shoulder clearly of same pot, with finger-print band apparently about 1½ ins. down the body. *Cf.* pot from Walthamstow (similar but without grooves) in Brit. Mus.

The type of pot with this ornament on the outside of the rim is that of *All Cannings Cross*, pl. 29, 5: it regularly has it also on the angular shoulder (see exx. below), and may be dated Hallstatt - La Tène I.

E. 88. Rim of thin buff pot, straight-bevelled inside, and outside moulded half-round with row of small finger-prints.
Entrance, N. bank, Surface.
The profile of this rim suggests a late date: see on "incipient bead-rims" (fig. 12) below, p. 113. Small neat finger-prints of this type actually occurred on a rim, not dissimilar save for the internal bevel, in the Mutlow Hill barrow, Wilbraham, associated with Romano - British wares of the 1st century A.D. (Fox, *Arch. Cambr. Reg.*, pl. XVI, 12, and p. 94), and the occasional survival beyond La Tène I of the habit in this form must be allowed for.

A. 113. Two pieces of fairly hard black pot, with some grit, inner surface smoothed; the rim, swollen externally, has a vigorous cable pattern formed by diagonal applications of the finger. Pit A, filling.

Mis. 3. Rim-fragment of dark gritty pot with similar pattern, somewhat weaker, outside. Surface.
For this form of finger-decoration see for example pieces from Wisley, *Ant. Journ.* IV, no. 1, pl. XIX, b. It is evidently a contemporary variant of the ordinary Hallstatt - La Tène I finger-printing; *cf.* example on shoulder of carinated bowl, perhaps with omphalos, from Grantchester: Fox, *Arch. Cambr. Reg.*, pl. XI, A 2

E. 97. Rim of smooth black ware with close diagonal slashes on outside. Entrance, S. bank, surface.
Slashed either with the finger-nail or a tool: *cf.* Caburn, *Suss. Arch. Coll.* LXVIII, pl. X, 73.

L. 1. Piece of hard grey-brown gritty pot, surfaces smoothed: rim flat-topped, groove down middle, diagonal finger-markings on outside: shoulder 1 in. below, slightly angular, with row of thumb-prints. Surface near Pit N.
Hengistbury, class A: *Report*, pl. X, 5.
Walthamstow: Brit. Mus.

E. 53. Part of everted rim and incurved neck of brown-grey coarse pot: large finger-prints on outside of rim, and irregular depression along top, and another row inside on curve of neck. Entrance, S. bank, surface.
The internal finger-print ornament seems unparalleled: the shape of rim and neck is in the same (Hallstatt) class as Scarborough: *Arch.* 77, p. 189, figs. 26-7.

X. 5. Part of shoulder (hardly angular at all) of grey-brown pot with row of finger-prints. Pit X, filling: 26 other fragments of the same pot were also found, but adequate reconstruction was impossible.
Decoration and profile like pot from Walthamstow in Brit. Mus.

Mis. 7. Fragment of angular shoulder of coarse red pot with row of finger-prints. Surface.
The pot apparently resembled those from Wisley, *Ant. Journ.* IV, no. 1, pl. XIX, g, j, and Worth, *ibid.* VIII, no. 1, p. 82, fig. 12.

E. 27. Part of incurved neck of brown-grey coarse pot, with bold finger-print ornament just below narrowest line.
Entrance, destruction-rubbish, unstratified.
Finger-printing in the concavity of such an incurved neck must be an early feature, as at Scarborough: *Arch.* 77, p. 187, figs. 16-18, 22, contemporary with the ornament on applied bands similarly placed, as also at Fengate: Hallstatt.

L. 4. Angular shoulder of very coarse gritty reddish-brown pot with row of squarish finger-prints just below carination. Surface near Pit N. Regular Hallstatt - La Tène I type as Park Brow: *Arch.* 76, p. 16, fig. 4.

AR. 21. Piece of sloping shoulder of red sandy pot with row of finger-prints. Area, unstratified. Suggests profile of pot from Walthamstow in Brit. Mus.

E. 119. Angular shoulder like L. 4 in profile, of thick coarse pot, with row of narrow vertical stab-marks along it. Entrance, in make-up of addition to Rampart, N. side.

K. 4. Similar fragment of smaller red pot with same ornament. Pit K filling.

E. 121. Similar fragment with sharper angle; the stab-marks diagonally set, and showing the curve of the finger-nail. Entrance, in make-up of addition to Rampart, N. side.
The stab-marks on all these last three may probably be made with the finger-nail.
Hengistbury, class A, *Report*, pl. X, 6.
Lidbury, *W.A.M.* XL, p. 31, pl. VII, 1.

E. 8. Fragment of scarcely angular shoulder of grey pot, fine grit in paste with small shallow finger-print ornament. Section 2 in make-up of Rampart, *cf.* AR. 21.

Note on Finger-Print Ornament.

This primitive form of decoration is common in various regions on Neolithic coarse pottery, and in Britain in the late Bronze Age is found regularly on applied bands or fillets and less often on the body of cinerary urns of the barrel and bucket type, and on the domestic wares associated with them, as on Cranborne Chase at South Lodge Camp and Handley Hill: Pitt-Rivers, *Excavations* IV, pl. 241, 246-7. These urns characterize an immigrant culture associated with certain late types of bronze weapons and objects (see below pp. 141-5, 150-2) and their distribution is confined to S. and S.E. Britain (see Clay's map. *W.A.M.* XLIII, p. 322, pl. I). The Cranborne Chase domestic wares closely resemble much of the coarse pottery of the All Cannings Cross Culture (*All Cannings Cross*, pp. 21 - 2, etc.) at St. Catharine's Hill no less than elsewhere, and this and the barrel and bucket urn culture have sometimes been thought identical (Clay, *W.A.M.* XLIII, p. 321 : *Ant. Journ.* VII, no. 4, p. 483).

Discussion of the general issue will be found below (pp. 140 ff.), but the following adverse points concerning the pottery may here be noted :—

(1) A distinction has been proposed between finger-printing on applied bands or fillets and finger-printing directly on the body or rim of the pot; the former is alleged to be an "aboriginal Bronze Age" character, the latter typical of Hallstatt immigrants (Clay, *W.A.M.* XLIII, pp. 319-20). (Reginald Smith, *Arch.* 77, p. 186). The occurrence at Scarborough of both types on the same vessel could be explained through the retention by Hallstatt invaders of native women for domestic purposes, including pot-making, in which they would reflect their situation by a compromise in decorative technique. That among peoples ignorant of the potter's wheel the women make the pots is well known, and the size of the prints on these wares often indicates the female finger, but whatever may have been the fate of native women at Scarborough and elsewhere, the proposed distinction of style breaks down, for (*a*) Late Bronze Age urns with finger-printing directly on the body are known as well as those with it on applied bands. (*b*) Of the sites where such a relation between Bronze Age and Hallstatt people could be suggested, Scarborough certainly, even if not Fengate and Grime's Graves (*P.P.S.E.A.* V, p. 107),

is outside the area of the barrel and bucket urn culture for which alone the contention could be valid. (*c*) As the latter culture is itself considered immigrant, and has on that ground and others even been identified with that of the Hallstatt invaders, " Bronze Age aborigines " could only be the Middle Bronze Age people of the overhanging-rim urns, which are not finger-printed.

(2) A further nicety of distinction on these lines, namely that between " finger-tip " and " finger-nail " ornament (*Arch.* 76, pp. 17-18: 77, p. 186) may thus also be rejected, and indeed as pure typology is perhaps questionable.

(3) What can possibly be said about this ornament is as follows :—

(*a*) On applied bands or fillets it occurs in both the Late Bronze Age and Hallstatt immigrant cultures, which are indeed themselves apparently closely related; in the former it is fairly regular, in the latter less common (*e.g. All Cannings Cross*, pl. 44, 48a, 1-2) and it seems to die out early.

(*b*) Whether on applied bands or not, its presence in the hollow of the neck, as distinct from the shoulder or rim of the pot, is only an early feature of the Hallstatt immigrant culture.

(*c*) The same is true of it placed on the top of the rim, though there are certain survivals of this, notably as a regular " piecrust " pattern.

(*d*) Finger-printing in regular or irregular rows covering a wide surface or the whole of the pot occurs on certain Late Bronze Age bucket-urns (*e.g.* from Colchester in Brit. Mus.; *V.C.H. Essex*, I, p. 265, fig. 17) and is perhaps also only an early feature of Hallstatt - La Tène pottery—such a fragment from Hengistbury (*Report*, pl. X, 16) was exactly paralleled by a surface sherd from St. Catharine's Hill, while other small pieces resembled some from Grime's Graves (*P.P.S.E.A.* II, p. 433, fig. 89, C - D).

(*e*) Applied in a single row (or seldom more) to the outside of the rim on the shoulder of the pot only, finger-printing is sometimes present on Late Bronze Age vessels, and is a regular feature of the immigrant Hallstatt culture (for the question of Continental

affinities, see below, pp. 151-6). It is especially common, as at All Cannings Cross, on pots of the high-shouldered type, while at The Trundle exactly similar pottery to the St. Catharine's Hill finger-printed ware has been found and dated Hallstatt - La Tène I (*Suss. Arch. Coll.* LXX, p. 54, pl. XI). On sites not datable before La Tène I, however, such as Fifield Bavant, Swallowcliffe, and Atwick, finger-printing is relatively rare. The preponderance of plain rims and shoulders at St. Catharine's Hill was not overwhelming, and the initial date here may be put in the Hallstatt period. Survivals of finger-print ornament after La Tène I occur, but they are certainly exceptional.

(*b*) Punched Decoration.

E. 1. Small red sherd, with row of fine punch-marks. Section 2, below old turf-line under Rampart.

R. 44. Coarse red sherd, with row of square or nearly square punch-marks. Entrance, in burnt clay facing of Rampart, S. side.

Mis. 9. Small red sandy sherd with three rows of small oblong punch-marks. Surface.

Mis. 19. Piece of a red sandy pot with angular ridge forming carination, and above it decoration of deep punch-marks below diagonal incised line.
Surface. This seems to belong to a carinated bowl rather like *All Cannings Cross*, pl. 28, 10 or 14. (*cf.* E 77, E 2, fig. 12), and the decoration was of punch-marks perhaps enclosed in triangles, as *ibid.* pl. 35, 13, and see below on R. 10, fig. 14.

Such punch-marking occurs on the Late Bronze Age pottery from Cranborne Chase (as well as the above, close parallels were found to Pitt-Rivers, *Excavations* IV, pl. 242, 6 and 9, rectangular punch-marks), and is common in many forms at All Cannings Cross. The type found there of deep incised lines and big dots, often triangular, usually filled with white inlay, was absent here, but along with the small varieties here shewn (*cf.* Wisley exx., *Ant. Journ.* IV, no. 1, pl. XVIII G, XIX c) it may be considered a Hallstatt - La Tène I type, with Late Bronze Age affinities, preceding that of shallow circular dots accompanied by broad shallow pencilled lines, which is characteristically La Tène II (see below on figs. 13 and 14).

(*c*) Incised Decoration.

E. 24. Small brown-grey sherd, with parallel incised lines. Entrance, in make-up of addition to Rampart, S. side. *cf.* South Lodge: Pitt-Rivers, *Excavations* IV, pl. 242, 8.

E. 15. Sherd of black ware, with parallel incised lines. Section 2, in old turf-line under Rampart. South Lodge: Pitt-Rivers, *ibid.* pl. 241, 10; Handley Hill, *ibid.* pl. 247, 7.

L. 10. Slightly curved piece, presumably shoulder, of heavy sandy pot, outer surface red, inner black, ornamented with two series, each of sharply-incised parallel lines, set nearly at a right-angle to each other. Surface near Pit N. *cf.* Wisley, *Ant. Journ.* IV, no. 1, pl. XIX d, and S. 1 below.

S. 1. Piece of side and base of pot of brown gritty ware, decorated with incised lines. Above the base are two parallel horizontal lines, then three chevrons, the triangles formed by the lowest chevron and the upper horizontal line being filled with diagonal stab-marks.
Pit S, filling. For shape of pot *cf.* A. 117, fig. 10. The decoration is of the sharply-incised Hallstatt - La Tène I type, as Hengistbury, Class A: *Report*, pl. X, 8, 10-15, regular also at All Cannings Cross and Fengate, though no close parallels to the detail of these examples occur.
Among late Bronze Age analogies from Cranborne Chase note esp. Pitt-Rivers, *Excavations* IV, pl. 247, 5 (Handley Hill). As noted above concerning punch-marks, this type of linear incision precedes the shallow pencilling of La Tène II (see below, figs. 13-14).

E. 70. Piece of the tall slightly incurved neck of a pot of dark reddish gritty ware, with angular geometrical pattern of sharply incised lines. Entrance, N. Bank, Surface. This attribution is confirmed by pots from Theale, Berks (Reading Mus.) and Fengate (Northampton Mus.) similarly decorated: the type seems early, probably Hallstatt: on decoration see above on S. 1.

3. Fig. 12.

Rim and Shoulder profiles of Bowls and Pots, and Sherds cut as counters.

(*a*) Bowls and Dishes.

V. 1. Fragment of small conical bowl with short vertical rim with row of small finger-prints: hard rather fine ware burnt bright red.
Pit V (under N. side of Entrance) in clean chalk filling. Apparently a finger-printed variant of the Hallstatt type known at Scarborough: *Arch.* 77, p. 190, fig. 52.

A. 132. Fragment of bowl with cupped lip: fine brown ware.
Pit A, filling. Apparently another variant of the same type, as *ibid.* figs. 52, 54. Both this and V. 1, however, might possibly belong to a larger vessel with lip cupped to fit a lid, as *ibid.* fig. 33.

Mis. 5. Piece of plain rim of conical vessel: buff sandy ware.
Surface. Probably of the open dish type of All Cannings Cross: pl. 28, 12-13.

Z. 4. Part of rim and side of steep-sided bowl: coarse red ware.
Pit Z, filling. *cf.* Scarborough: *Arch.* 77, p. 190, fig. 54.

E. 77. Part of rim and side of carinated bowl of dark reddish-brown ware: rim plain and nearly vertical, angular ridge marking carination, with slight groove just above edge, and above again faint traces of irregular punch-marking.
Entrance, occupation-level on surface of original Rampart, S. side. Type of All Cannings Cross: pl. 28, 14.

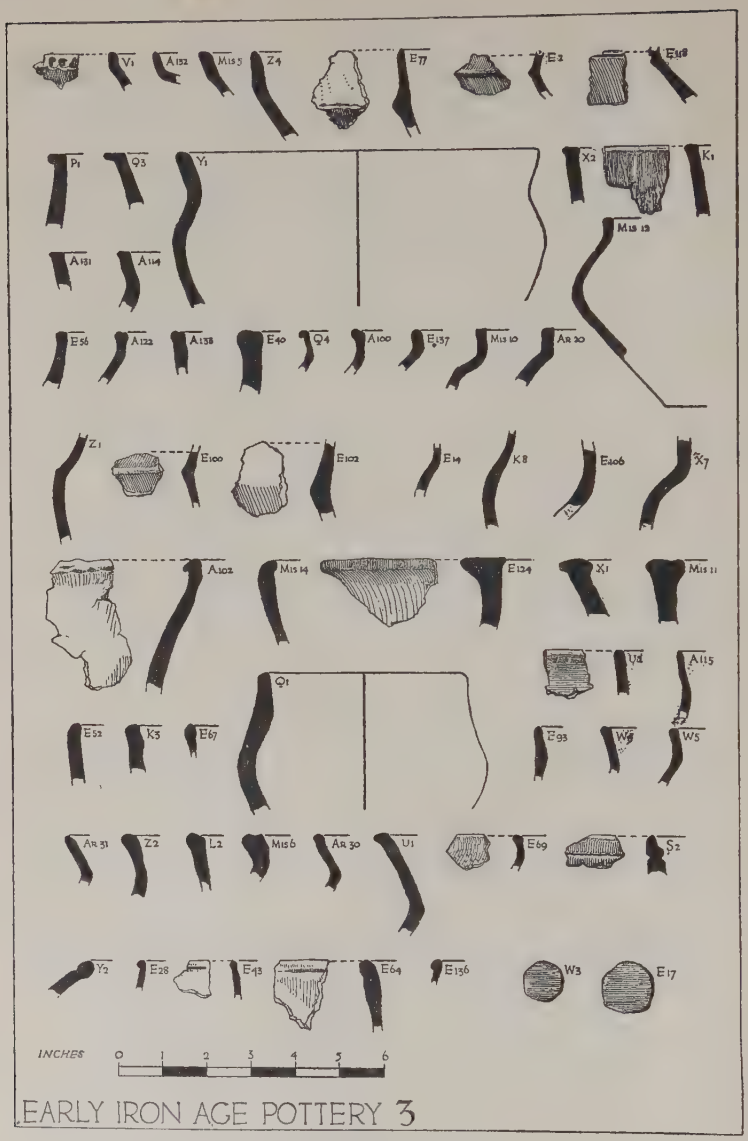

FIG. 12.

Rim and shoulder profiles of bowls and pots (pp. 107-13), and sherds cut as counters (p. 113).

E. 2. Cordoned carination of angular bowl, fairly fine dark reddish ware. Section 2, old turf-line under Rampart. The carinated shoulder of a cordoned bowl: All Cannings Cross type, pl. 28, 4.

E. 118. Part of thin, smoothish side of bowl of brownish gritty ware, shewing angle of some 135°: below, side tapering down towards narrow base: above, horizontal incised groove, and beginning of vertical wall.
Entrance, make-up of addition to Rampart, N. side.
All Cannings Cross bowl type, pl. 34, 12-13, probably decorated similarly above groove.

Of all these bowl and dish forms, the earliest types are Hallstatt, and none seem to be later than La Tène I. It is notable that the furrowed type of Hengistbury, All Cannings Cross, etc., was absent.

(*b*) Plain Rims and Shoulders, mostly of unornamented Pots.

P. 1. Flat-topped rim, with projecting lip, of straightish-necked vessel of dark sandy ware: big flint grit in paste. Pit P, filling. Swallowcliffe: *W.A.M.* XLIII, pl. V, 1, 3.

Q. 3. Similar rim of pot with everted neck, similar ware.
Pit Q, filling. Park Brow: *Arch.* 76, p. 17, fig. 6.
Swallowcliffe: *W.A.M.* XLIII, pl. V, 5.

Y. 1. Rim and much of side of pot of dark sandy ware: rounded shoulder and incurved neck leading up to tallish everted rim. Pit Y, filling. A decadent form of the Hallstatt type of A. 1 (fig. 10), dated late La Tène I at Findon: *Ant. Journ.* VIII, no. 4, p. 454, fig. 4a; *cf.* Lidbury: *W.A.M.* XL, p. 30, pl. VII, 4.

X. 2. Piece of flat-topped straight rim of bright red hard sandy pot. Pit X, filling.

K. 1. Piece of straight rim, top irregular but nearly flat, of pot with tall slightly everted neck bearing faint traces of parallel oblique ornamental lines.
Thin dark rather sandy ware. Pit K, filling.
Both these suggest an approach to the Hallstatt type of A. 1 (fig. 10), *cf.* Park Brow: *Ant. Journ.* IV, no. 4, p. 353, 7; and here A. 131, 114.

A. 131. Flat-topped rim, with hardly projecting lip, of similar pot, of black ware.

A. 114. Similar rim of sandy grey ware. Both Pit A, filling.
As above; and *cf.* Swallowcliffe: *W.A.M.* XLIII, pl. IV, 2 (La Tène I).

E. 56. Plain flat rim of shouldered reddish coarse pot.
Entrance, N. bay, final burnt layer.
Scarborough: *Arch.* 77, p. 190, fig. 35.

A. 122. Plain swollen rim of shouldered pot, hard well-baked brown ware. Pit A, filling.
Belongs to type as Swallowcliffe: *W.A.M.* XLIII, pl. V, 7, 11, 14.

A. 133. Plain rim, slightly swollen and with irregular top, of black pot with smoothed surface, bearing externally faint diagonal lines. Pit A, filling. The pot was either shouldered like A. 114, or of bucket-shape like Worthy Down, *H.F.C.* X, pt. 2, pp. 182-3, fig. 28: the very similar and contemporary fig. 26 *ibid.* is scored externally.

E. 40. Plain swollen rim of coarse thick red vessel.
Entrance, destruction-rubbish, unstratified.
Very possibly of a bowl type, as Scarborough: *Arch.* 77, p. 189, fig. 28.

Q. 4. Rim of small grey-brown shouldered pot with projecting lip.
Pit Q, filling.
A small variant of the type of A. 1, fig. 10, rather than an incipient bead-rim.

A. 100. Irregularly everted rim and straight neck of shouldered pot, light grey sandy clay with flint grit, surface somewhat smoothed.
Pit A, filling.
Variant of same type as A. 122.

E. 137. Plain short slightly everted rim of shouldered coarse gritty pot.
Entrance, N. end of Section 4, unstratified but on area scraped for rampart-material and so presumably subsequent to earthwork.
Perhaps later in type than the foregoing regular Hallstatt - La Tène I examples: *cf.* R. 4, fig. 14 (early La Tène II).

Mis. 10. Piece of rim and shoulder of pot of hard, thin, dark ware: rim top flat with slight irregular groove along it, shoulder with bulge below carination. Surface.
Hengistbury, Class A: *Report*, pl. XVI, 14.

AR. 20. Short, plain, flat-topped rim and sharp neck-and-shoulder angle of pot of brown earthy ware. Area. *cf.* Park Brow: *Ant. Journ.* IV, no. 4, pp. 354-5, figs. 11, 13, and pot from the Thames in Brit. Mus.

Mis. 12. Restoration from 4 pieces of small vessel with short, straight rim and wide body tapering towards narrow base, brown gritty ware. Surface.
This typical Hallstatt form also occurred at Stanmore straight across the Itchen opposite: *H.F.C.* X, pt. 1, p. 65, pl. II, 19.

Z. 1. Part of neck and shoulder (rim just missing) of high-shouldered pot, hard, dark, sandy ware. Pit Z, filling. *cf.* Mis. 10, and pot from the Thames in Brit. Mus.

E. 100. Angular shoulder of vessel of brown coarse ware.
Entrance, N. Bank, Surface.
Also recalls pot from the Thames in Brit. Mus.

E. 102. Similar portion of larger vessel of reddish-brown coarse gritty ware. Entrance, roadway, surface.
cf. Carinated bowl from Lancing (Hallstatt type) in Brit. Mus., and Wisley: *Ant. Journ.* IV, no. 1, pl. XVIII, E.

E. 14. Neck-and-shoulder curve of smooth black vessel.
Section 2, in old turf-line under Rampart.
For type of this and the two following, *cf.* Swallowcliffe: *W.A.M.* XLIII, pl. V, 7, 11, 14 (La Tène I).

K. 8. Curved neck and shoulder profile of vessel of brown coarse ware.
Pit K, filling. Grantchester: Fox, *Arch. Cambr. Reg.*, pl. XI, A. 4 (slightly more angular).

E. 106. Curved neck of vessel of dark ware without grit, fairly smooth surface. Entrance, Hole 14, filling.

X. 7. Straight neck and curved shoulder profile of pot of brown sandy ware. Pit X, filling.
Park Brow: *Arch.* 76, p. 19, fig. 10 (La Tène I).

A. 102. Irregular hooked rim and swelling side of pot of fairly hard gritty ware, red to brown outside, black and smooth inside, of which

many other fragments were found, including one of plain base. Pit A, filling.
Contour as Scarborough: *Arch.* 77, p. 190, fig. 35; rim as *ibid.* fig. 36. Hallstatt.

Mis. 14. Piece of red coarse vessel with slightly incurved rim. Surface. Not very common type; Fifield: *W.A.M.* XLII, pl. VII, 20-22.

E. 124. Heavy flattened rim, with big external and slight internal projection, of large pot of very coarse and gritty ware.
Entrance, occupation-level in S. Bay sealed by dark silt. Such rims seem an early Hallstatt - La Tène I character.
Scarborough: *Arch.* 77, p. 187, 16-18; p. 190, 46-7.
Martin Down: Pitt-Rivers, *Excavations* IV, pl. 313, 4-5.
Park Brow: *Arch.* 76, p. 19, figs. 8-9 (less pronounced).

X. 1. Rather similar rim, less flattened, of big bowl (? dish) with everted neck, heavy dark sandy ware. Pit X, filling.

Mis. 11. Rim of similar type with big internal and slight external swelling: heavy brown coarse ware. Surface.

E. 52. Plain rounded rim and straight neck of smooth red vessel.
Section 2, Ditch silt, stratum 3.
Swallowcliffe: *W.A.M.* XLIII, pl. V, 8.

K. 3. Rough plain rim, with internal swelling: darkish coarse ware. Pit K, filling. Like E. 52 possibly of a bucket-shaped pot.

E. 67. Plain slightly swollen rim of vessel of thin gritty ware.
Entrance: occupation-layer on surface of original S. Bank. Possibly of a pot like L. 2 (below) but smaller.

Q. 1. Plain rim and shouldered side of vessel of heavy grey coarse ware. Pit Q, filling. Presumably La Tène I: suggests a debased form of the biconical urn as from Weybridge: *Ant. Journ.* V, no. 1, p. 75; *cf.* Hunsbury: *Journ. Northants Nat. Hist. Soc.* XIX, pl. XV, 1; also here AR. 4-5, fig. 13, and R. 3, fig. 14.

U. 2. Plain rounded rim and slightly everted neck of small black vessel: two rough notches below rim outside. In filling of Pit U (mediæval lime pit).

A. 115. Straight tapering rim and curved neck of shouldered vessel of hard-baked gritty ware, inner surface grey, outer surface red and burnished. Pit A, filling.

E. 93. Plain rounded rim and neck, with slight internal swelling, of smooth black vessel. Entrance, roadway, surface.

W. 4. Straight everted rim of shouldered vessel, dark sandy ware.

W. 5. Similar piece with shorter rim and more of shoulder.
Both Pit W, filling.
These five pieces, U. 2—W. 5, may be of bowls or squat pots.
Scarborough: *Arch.* 77, p. 189, fig. 30.
All Cannings Cross: pl. 28, 19.
Casterley: *W.A.M.* XXXVIII, p. 104, pl. IV, 12.
Hauxton Mill: Fox, *Arch. Cambr. Reg.*, pl. XI, A. 5—6.

AR. 31. Everted rim of small shouldered pot, grey sandy ware.
Area. Scarborough: *Arch.* 77, p. 190, figs. 30-1.
Theale: drawing kindly supplied by Mr. G. C. Dunning (similar shape but with finger-print ornament).

Z. 2. Everted rim, slightly swollen, of not dissimilar pot.
Pit Z, filling. Variant of same type but with less marked contour: compare Trumpington and Newnham exx: Fox, *op. cit.*, pl. XVI, 1, 10.

L. 2. Irregular rounded rim of hard grey-brown gritty ware.
Surface near Pit N.
Probably of a bucket-shaped pot; Worthy Down: *H.F.C.* X, pt. 2, pp. 182-3, fig. 34.

Mis. 6. Thick everted rim with depression on top, no doubt of pot of regular shouldered type: coarse gritty ware.

AR. 30. Rim like AR. 31, with indented irregularities on top: brown sandy ware. Area. See AR. 31.

U. 1. Plain flattish-topped everted rim and neck-and-shoulder angle of hard grey coarse-ware pot.
In filling of Pit U (mediæval lime-pit).
The nearest approach among the St. Catharine's Hill pottery to the tall-necked round-bodied Hallstatt type, as at
Park Brow: *Arch.* 76, p. 17, fig. 5;
Scarborough: *Arch.* 77, p. 189, fig. 25;
Walthamstow: in Brit. Mus.
The type is rare at Atwick (La Tène I), where (*Man* 1910, 48) only 2 exx. were found (drawing kindly supplied by Mr. G. C. Dunning): a presumably later survival from Hunsbury (Northampton Mus.) has curvilinear incised decoration, anomalous on a pot of this really Hallstatt form.

E. 69. Slightly swollen rim and curved neck of pot of thin hard black ware: pattern of rows of little incised notches on neck.
Entrance, S. Bank, surface.
Type like A. 100 (above): ornament as at Hengistbury: *Report*, pl. X, 13.

S. 2. Fragment apparently of rim of very coarse red-brown vessel: gently tapering profile, broken by horizontal rib ½ in. below top inside with horizontal groove just below it, and corresponding groove outside. Pit S, filling. Seems to combine the features of two Fifield exx.; *W.A.M.* XLII, pl. VII, 46, 47.

This selection of the very large number of rim-and-shoulder profiles of plain vessels comprises the most typical examples which may be dated from Hallstatt to the end of La Tène I. Comparison of material from all the known sites seems to shew that the typically Hallstatt flattened rim tends to disappear in La Tène I before rounded or irregularly swollen forms, which are however from the beginning present, though not predominant as they became by the end of the period.

(*c*) Incipient Bead-rim types.

Y. 2. Rim of globular pot with narrow mouth and roughly rounded rim with slight groove forming an approximation to beading: dark coarse gritty ware, outer surface smoothed. Pit Y, filling. The suggestion of the La Tène III bead-rim pot in this profile is misleading: the rough slight grooving below the rounded rim resembles that of E. 64, *q.v.*, and for the narrow mouth *cf.* Hallstatt exx. at Scarborough: *Arch.* 77, pp. 189-190, figs. 31-32, and the bowls of Hallstatt date with incurved rim from Southern Hill (Reading) and Margate in Brit. Mus.; a drawing of a La Tène I variant of the same type from Atwick has been kindly supplied by Mr. G. C. Dunning. The rim suggests a transitional La Tène I—II date for the present example.

E. 28. Incipient bead-rim fragment of hard brown ware, thin with smooth surface.
Entrance, in make-up of original S. Bank.
Fifield: *W.A.M.* XLII, pl. VII, 39, 43; *cf.* E. 136 (below).

E. 43. Shallower rim of similar type and quality.
Entrance, final burnt layer over dark silt in S. Bay.
cf. Fragment from Wisley in Brit. Mus.

E. 64. Thickened rim of pot perhaps of bucket-shape, with shallow groove forming rudimentary beading; black gritty ware.
Entrance, area N. of N. Bank scraped for rampart-material, thus post-dating the earthwork.
cf. Fragment from Wisley in Brit. Mus.

E. 136. Incipient bead-rim fragment of brownish coarse ware. Entrance, roadway, surface. Beading a little more pronounced than Y. 2: thus typologically as late as any piece from the settlement.
Fifield: *W.A.M.* XLII, pl. VII, 42.

For the incipient bead-rim type generally see *W.A.M.* XLII, pl. VII, 39-45. It is a natural development from the plain rounded rim prevalent, as seen above, in La Tène I, which appears towards the close of that period and is characteristic in various forms in La Tène II (see figs. 13-14 below). It is not desirable to press the typology too closely, for though the flat rim may be called largely Hallstatt, the plain rounded rim La Tène I, the incipient bead-rim La Tène II, and the full bead-rim La Tène III, a good deal of overlapping is inevitable. It seems necessary, though, to date all these five examples about the end of La Tène I, and to associate them with the largely La Tène II groups from the Area and Pit R in figs. 13-14. The type was very much rarer than any of the flat, rounded or swollen types described above.

(*d*) **Pot-sherds shaped as Counters.**

W. 3. Roughly circular counter cut from dark sandy ware.
Pit W, filling.

E. 17. More irregular counter cut from grey smooth ware.
Section 2, in make-up of Rampart.

4. **Fig. 13.**

Pottery from the Area: *i.e.* the ground S. of the S. Entrance Bank and adjoining the S. end of Section 4, which was clearly scraped systematically, like the corresponding area on the N. side, to provide rampart-material (see pp. 13, 17, 92). This group of pottery, which was lying unstratified all over the Area, is predominantly early La Tène II in type; it is intimately linked with the group from Pit R (fig. 14) by the presence in each of fragments of the same vessel, R. 3 (see p. 92 above), and both groups thus post-date the earthwork and may be assigned to the last phase of the settlement, as no pottery of later type was

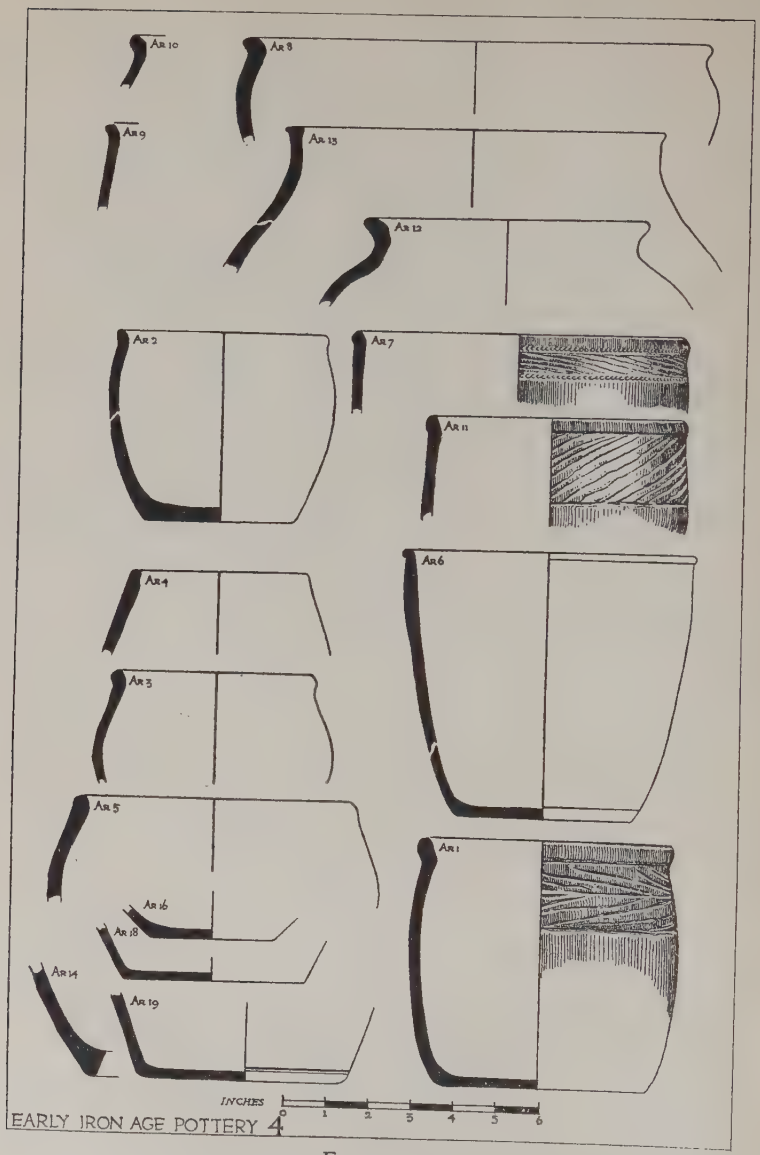

FIG. 13.
Pottery from the Area (pp. 113-6).

found (see further p. 122 below). Some of the Area pieces have appeared in figs. 11-12, but this page illustrates the outstanding and representative specimens.

AR. 10. Rim-fragment with rounded everted lip, brown gritty ware.
Caburn: *Suss. Arch. Coll.* LXVIII, pl. XV, 138; and *cf.* R. 4, fig. 14.
Perhaps late La Tène I.

AR. 8. Somewhat flattened rim with everted lip of pot, very coarse gritty ware, with slightly swelling shoulder.
Caburn: *ibid.* 132: probably early La Tène II.

AR. 9. Fragment of pot with somewhat everted rim and slightly slanting side, coarse gritty ware.
Caburn: *ibid.* 130. La Tène I—II.

AR. 13. Flat-topped rim and curving neck and shoulder of big pot of very earthy brown ware, full of bits of straw, sand, pebble-grit, etc. A Hallstatt type.
cf. Scarborough: *Arch.* 77, p. 190, fig. 41 (rim, fig. 46); either a survival or much more probably remains of an earlier vessel accidentally present in this later group.

AR. 12. Rim and shoulder of dark brown hard coarse pot with smooth outer surface: blunt tapering rim sharply everted above curved neck and widely swelling shoulder. The superficial likeness to a La Tène III—Romano-British type is misleading; analogies, *cf.* Swallowcliffe: *W.A.M.* XLIII, pl. IV, 4 and 6; pl. VI, 9, suggest a late La Tène I date, while a not dissimilar rim from The Trundle (*Suss. Arch. Coll.* LXX, p. 55, pl. XII, 142) is dated La Tène II.

AR. 2. Rim, most of side, and base of pot of dark grey ware with smoothed surface, slightly bulging contour, and blunt rim approaching incipient bead-rim type.
Caburn: *Suss. Arch. Coll.* LXVIII, pl. IX, 66; La Tène I-II; drawing of an earlier (Hallstatt) form of much the same type from Grime's Graves kindly supplied by Mr. G. C. Dunning.

AR. 7. Top part of straight-sided pot of dark grey very gritty ware, with flattish incipient bead-rim.
Zone of decoration below it, of faint shallow diagonal tooling between two rows of impressed circular dots. Same decoration on vessels of round-shouldered La Tène II form at Worthy Down: *H.F.C.* X, pt. 2, pp. 182-3, figs. 31, 38-9.

AR. 11. Top part of similar but narrower pot of brownish coarse gritty ware; rim much the same, ornamented zone broader with diagonal tooled lines rather sharper and less regular, and horizontal demarcating lines likewise. Shape of general La Tène II type as at Park Brow and Findon, but tooling of decoration suggests a date early in the period; *cf.* AR. 1 (below) and R. 4, 1, 10 (fig. 14): certainly cruder than Worthy Down piece: *H.F.C.* X, pt. 2, pp. 182-3, fig. 42.
For rim, *cf.* Fifield: *W.A.M.* XLII, pl. VII, 32.

AR. 4. Upper part of plain-rimmed vessel of hard grey ware clearly of biconical type (*cf.* Q. 1, fig. 12) as at Wisley: *Ant. Journ.* IV, no. 1, pl. XIX.

AR. 6. Nearly complete profile of bucket-shaped pot of buff to grey gritty ware: incipient bead-rim with groove as on E. 28, fig. 12, and similar horizontal groove just above base.
Hengistbury, class C: *Report*, pl. XIX 8, La Tène II.

AR. 3. Upper part of vessel not unlike AR. 2 (above): somewhat bulging shoulder and flattish incipient bead-rim without demarcating groove: dark grey ware with smoothed surface.
Caburn: *Suss. Arch. Coll.* LXVIII, pl. XV, 143.
La Tène II.

AR. 5. Upper part of heavy grey-ware vessel approaching the type of AR. 4 (above) but larger and more curved in profile, with plain rounded rim.
Swallowcliffe: *W.A.M.* XLIII, p. 542.
Hardly before late La Tène I.

AR. 1. Nearly straight-sided pot (base partly restored) of dark grey gritty ware with smoothed surface. Thick rim of type between AR. 11 (above) and Park Brow: *Arch.* 76, p. 21, fig. 13, which has body of same form (La Tène II). Band of decoration below rim, consisting of three horizontal shallow tooled lines, nearly equally spaced, the intervening zones filled with similar lines sloping diagonally in opposite senses. The pattern recalls the sprawling style of All Cannings Cross, and in type clearly precedes the neater execution of the same design on R. 17, fig. 14, *q.v.*: this specimen should thus be early in La Tène II.

AR. 16. Base of fine dark grey gritty ware of pot probably of the broad-shouldered type of R. 5 (fig. 14), *q.v.*

AR. 18. Base of more upstanding pot of thin similar ware.

AR. 14. Base-angle and lower part of side of pot of ware like AR. 13 (above) suggesting early date.

AR. 19. Base of pot of thin brown ware in form clearly like AR. 6 (above), with similar but wider horizontal groove above it.

With these four exx. of bases, which may all be La Tène I-II, *cf.* those on fig. 10 (p. 100 above). At Findon the typical early La Tène II base (*Ant. Journ.* VIII, no. 4, p. 455, fig. 17) with this horizontal groove comes out below it into a half-round projecting foot, absent from St. Catharine's Hill; whether or no the present specimen is thus earlier than the Findon example, the complete absence of the distinctive bases dated at Findon to late La Tène II (as *ibid.* fig. 9 a) is notable and may be considered important. The less developed earlier forms clearly persisted later, but reliable dating of any piece from the settlement to late La Tène II will be seen to be inadmissible (see p. 122, 169 below).

It may be noted in conclusion that no bases of the foot-ring and omphalos type were found.

5. **Fig. 14.**

(*a*) **Pottery of Hengistbury class B.**

K. 7. Rim, angular neck, and sharp shoulder of nearly black hand-made ware with well-polished surface.
Pit K, filling. The distinctive quality of the ware and the form of the rim clearly indicate the Hengistbury B class, but the shoulder profile is not paralleled anywhere in *Report*, pl. XVII—XVIII.

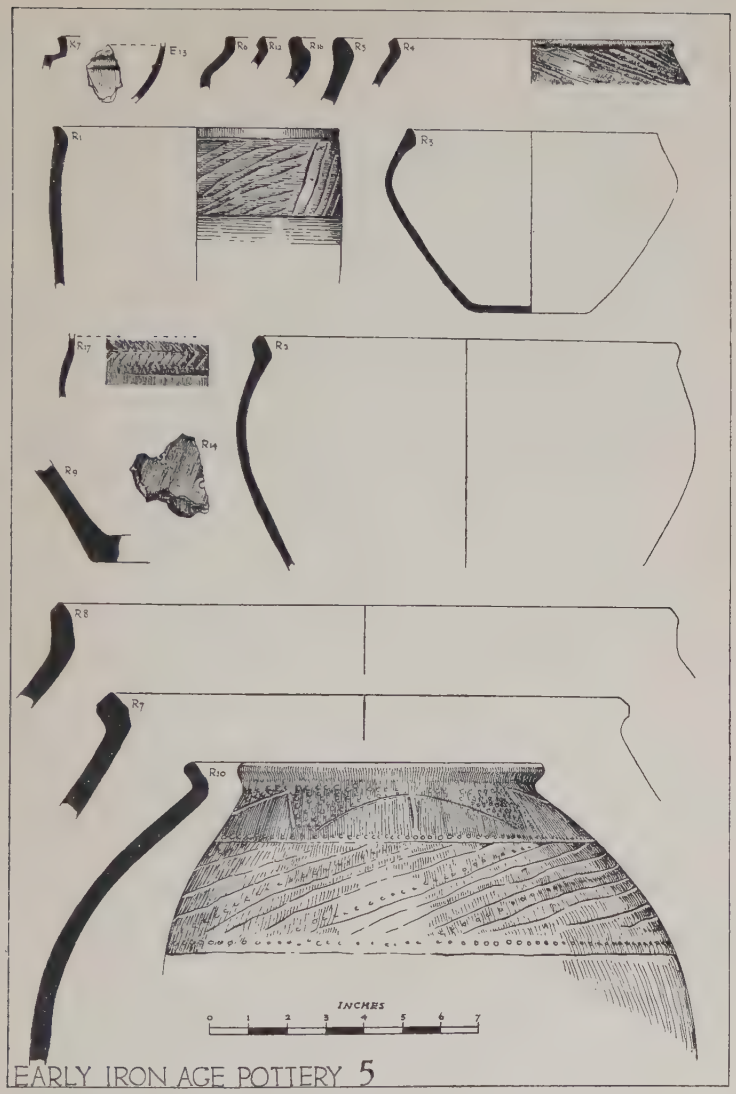

FIG. 14.
Cordoned fragments (pp. 116-7), pottery from Pit R (pp. 117-20).

This should apparently be added to the range of types of this uncommon class, which is assigned to La Tène I (*ibid.* pp. 36-7).

E. 13. Portion of neck-and-shoulder curve of vessel of the same nearly black ware, smooth but with the surface polish rather abraded: across it runs a low cordon.
Section 2, in old turf-line under Rampart.
Hengistbury, class B: *Report*, pl. XVIII, 17, 19, or perhaps a big bowl as *ibid.* pl. XVII, 3, 4: La Tène I.

No other specimens of this class occurred.

(*b*) Pottery from Pit R.

On the connexion of this group with the bulk of the Area pottery, see above, pp. 92, 113. Its limits of date seem to be the transition from La Tène I and the middle of La Tène II, and it is clearly the latest group from the site (see above, p. 92, and below, pp. 122, 169).

R. 6. Plain rim and high shoulder of vessel of coarse dark ware with white flint grit: surface black outside, grey inside. Presumably a squat pot as from Hunsbury (Northampton Mus.): the date should be late La Tène I - La Tène II.

R. 12. Incipient bead-rim of the type with almost triangular section: black coarse ware. Drawing of rather better ex. has been kindly supplied by Mr. G. C. Dunning from Highfield, Wilts: should be La Tène II.

R. 16. Slightly everted plain rim of red gritty ware with the typical La Tène II internal swelling here forming a ledge to take a lid. *cf.* Ex. from Wisley in Brit. Mus.

R. 5. Blunt rim of heavy sandy ware with the ordinary internal swelling. *cf.* Ex. from Wisley in Brit. Mus.

R. 4. Upper part of pot of hard-baked gritty ware with black burnished surface: short rim slightly everted, of rather angular profile approaching that of R. 12; the slope below it out towards the shoulder decorated with roughly-tooled irregularly-spaced diagonal lines. *cf.* AR. 11 (fig. 13), and R. 1 (below): must be early La Tène II.

R. 1. Upper part of straight-sided vessel of hard-baked gritty ware with black well-polished surface outside and in (one fragment has been burnt dull brown outside after fracture). The rim shews a very slight lip and an internal swelling: below it a zone decorated with two differently sloped sets of roughly-tooled and irregularly-spaced diagonal lines. Rim recalls that of a slightly more bulging ex. from Hunsbury in Northampton Mus. with finger-print ornament, presumably La Tène I: also this has very irregular scoring on the body, as on exx. from Wisley and Coldham Common, Cambs., in Brit. Mus.: the present ex. shews an advance on these, and thus (and by its rim) may be dated early La Tène II, clearly preceding the regular neater tooling occurring later in the period.

R. 3. Plain vessel with wide mouth, high maximum diameter, and small base, of hard-baked black clay almost free from grit, outer surface well burnished. One piece of rim came not from the pit but the

Area, and had lost its burnish through exposure: the bulk of the remaining pieces were found close together near the bottom of the pit. The rim affords the best example from the site of the characteristic La Tène II internal swelling, as from Worthy Down: *H.F.C.* X, pt. 2, pp. 182-3, fig. 29, and Findon: *Ant. Journ.* VIII, no. 4, p. 453 (early La Tène II). Body form developed from the biconical type of Q. 1, fig. 12, *cf.* AR. 4-5, fig. 13; also Fifield: *W.A.M.* XLII, pl. IV, 4 (more primitive), and the later La Tène II form, Worthy Down, *loc. cit.* fig. 38.

R. 17. Upper part of gently convex side of pot of thin dark sandy ware, with decorated zone consisting of a horizontal band of chevron-pattern in shallow burnished tooled lines with a similar line running through the points of the chevrons: below, row of shallow dots surmounting another similar horizontal line. For chevron-pattern *cf.* Wisley: *Ant. Journ.* IV, no. 1, p. 44, fig. 9. La Tène II style: same pattern deeper and sharp-cut (*cf.* All Cannings Cross incised technique) at Hollingbury, Sussex (*Brighton and Hove Archæologist* I, pl. III, 4), would seem to be its earlier counterpart.

R. 9. Plain base-angle of heavy coarse-ware vessel, brownish to dark grey. *cf.* AR. 14 (fig. 13), and note inevitable persistence of the old simple shape (see fig. 10 above, and p. 116).

R. 14. Fragment of black gritty coarse-ware base with two round perforations. These are common throughout the Early Iron Age; early exx. at Grime's Graves: *P.P.S.E.A.* II, p. 433, fig. 89 (not recognized as of this date at the time, 1917).

R. 2. Side of big convex pot of hard-baked gritty clay, black with burnished surfaces (some fragments have been burnt after breakage to bright light red). Short blunt rim very slightly everted with almost angular internal swelling. Same shape as Wisley: *Ant. Journ.* IV, no. 1, pl. XVIII A, but rim better moulded; both seem to be La Tène II.

R. 8. Vertical blunt rim and sloping shoulder of very large heavy pot of thick coarse dark grey ware full of flint grit, probably a storage-jar, which must have stood at least 2 ft. high.
La Tène I or later.

R. 7. Rim and sloping shoulder of pot of similar ware, colour pink to grey, also probably a large storage-jar: rim short, swollen, everted, and roughly angular, recalling Atwick exx. (La Tène I), which however are nearer to the early flat-topped type (drawings kindly supplied by Mr. G. C. Dunning): this one could be later.

R. 10. (Photograph, pl. IX, 12.) Upper part of large vessel, perhaps also a storage-jar, of coarse gritty ware varying in colour from black to light brown, the surface smoothed: the rim short, plain, and everted, joining immediately to the wide globular body. The upper slope covered with two zones of decoration in shallow burnished lines, made with a blunt tool, and dots to match: (1) beginning directly below rim, two opposed sets of irregular triangles filled with dots, with vertical line downwards from point of contact, (2) below this, uneven lines sloping down to the left, with row of dots between every third and fourth line: demarcated top and bottom by a horizontal line below a row of dots.
This shape seems to be the ancestor of the big La Tène III jar with globular body: the rim is a bolder variant of R. 4 (above) and seems to be something of a development from an All Cannings Cross type as pl. 32, 3. A piece of similar form but with much

less rim from Lower Halstow, Kent: *P.P.S.E.A.* V (no. 27), p. 291, fig. 9, can be assigned to La Tène II; this has similar diagonal tooled lines, while one from The Trundle (*Suss. Arch. Coll.* LXX, p. 55, pl. XII, 147), also La Tène II, corresponds in form, but the pattern, though similarly executed, includes curvilinear tooling suggesting a more advanced style (see below). Though analogous triangles of such bluntly-pencilled lines filled with dots occur at Fengate (drawing kindly supplied by Mr. G. C. Dunning), perhaps at a quite early date, the technique on earlier (Hallstatt - La Tène I) vessels is more usually sharp incision, as characteristically at All Cannings Cross, while this shallow tooling belongs rather to La Tène II. The pattern here, however, is of a sprawling type at least as closely akin to the All Cannings Cross style (*e.g.* pl. 31, i, pl. 34, 10) as to the neat work on many La Tène II vessels (*e.g.* at Worthy Down), and in particular is not comparable to the festoon or swag-pattern in both lines and dots present in La Tène II, *e.g.* at Park Brow and Findon: *Arch.* 76, p. 21, figs. 14, 15: *Ant. Journ.* VIII, no. 4, p. 456, fig. 9 a: Worthy Down, *H.F.C.* X, pt. 2, pp. 182-3, fig. 43; and Fifield Bavant: *W.A.M.* XLII, pl. VI, 1, 2, 4: all these must be later than our piece.

On the whole a date early in La Tène II is to be preferred.

It is clear that La Tène II pottery is directly developed from that of Hallstatt - La Tène I over most of the area of Britain where the latter occurs. On sites where habitation was continuous, the sequence of types is uninterrupted, and a good example of this has recently been published, namely The Trundle (*Suss. Arch. Coll.* LXX: note esp. pp. 37-9, 41), where the features of the Early Iron Age occupation closely resemble those of St. Catharine's Hill in this and other ways, though it seems to have lasted longer. The same may quite possibly be true of Worthy Down, where a little All Cannings Cross type pottery, dated *c.* 500 B.C., was discovered as well as La Tène II (*H.F.C.* X, pt. 2, p. 191), though the series is incomplete. Here too the occupation lasts later than at St. Catharine's Hill, as is shown not only by some of the pottery types, but by a 1st century B.C. glass bead (*ibid.* p. 184), but perhaps all the La Tène II material need not be as late as this century, as is suggested in the Report (p. 191).

Anyhow, there can be little doubt that a single culture is represented successively by the pottery from Scarborough (and perhaps Grime's Graves), All Cannings Cross and Hengistbury (class A and later C[1]), Swallowcliffe, Fifield Bavant, and La Tène II wares as from the Trundle and Findon Park, to name no more sites than these. A good part of the sequence is

1. The evidence concerning Hengistbury Class B (early cordon and omphalos ware) is not yet very abundant; it occasionally appears on sites of this culture, *e.g.* here and at Fifield Bavant: *W.A.M.* XLII, pl. VII, 1–4 (bases).

covered at Wisley, and at Park Brow, where in spite of a change of site the excavators considered that the occupation was continuous from Hallstatt to Romano-British times (*Arch.* 76, pp. 10-11), the development can be closely followed.

Local variations are no doubt an important feature of the culture, and these have been amply allowed for by recent writers, but a degree of unity is clearly recognisable at least within the geographical limits sketched below (pp. 143-7).

The history of the distinctive finger-print ornament has already been essayed: for the rest, the flat-topped rim, the neck sharply everted at the Hallstatt angle and the double curve Hallstatt profile, may be posited as early features, while the plain bucket-shape may well persist throughout, and the tall high-shouldered vessel, obviously modelled originally on the bronze situla, is present early in the sequence and seems gradually to lose its angularity of form.

All the pottery is hand-made: while what can be called Late Bronze Age may incline to softness, the Hallstatt and earlier La Tène ware is coarse, usually hard, and gritty, varying in colour from black to reddish, and rough to the touch except when burnished, as is most often the case with vessels reddened with haematite, which are commonly of the type of A. 1 (fig. 10), and as at All Cannings Cross also furrowed and cordoned bowls, though these are not by any means everywhere present. Decoration other than finger-printed or punched is effected, whether in lines or stabs, by sharp incision before baking (decoration scratched after baking is rarer), sometimes filled with white inlay (this last feature was absent at St. Catharine's Hill). The patterns are as a rule angular: they may sometimes be termed geometric, but anyhow more often sprawling. The principal shapes of vessel cover numerous variations of the high-shouldered, everted-neck, curving, and bucket types, and among the rarer forms, as well as the bowl types noted above, a bi-conical vessel is notable, and omphalos bases are sometimes present.

Plain vessels, often with rounded rims, seem to be prevalent in La Tène I, but the transition to La Tène II is marked not only by improvement in the surface of the ware, which comes to acquire the well-known 'soapy' feel, and by the growing prevalence of barrel-shaped and more rotund types, but also by various decorative advances. The incipient bead-rim is often characteristic, and the rim is almost always thickened and has an internal swelling: the base, formerly plain or with a slightly

projecting foot, now sometimes has its projection demarcated by a groove, and later in the period by more definite ornament. In decorative technique, sharp incision gives place to shallow dotting and pencilling with a blunt tool. The early La Tène II patterns are irregularly executed, and shew little advance on the old angular patterns, though a growing neatness is perceptible; but as the period advances appreciation of the curve comes in, and not only swag and festoon patterns, but more advanced curvilinear designs, make their appearance. Thus the pottery-ornament comes to have more of the spirit of true La Tène art, though this was always better exemplified in the distinct South-Western Celtic area, on the best-known Somerset sites especially towards the end of the La Tène period. At least, this development in the culture we are considering is sufficiently marked on such sites as Park Brow and Findon Park to make it clear that on this evidence the St. Catharine's Hill occupation must have ceased before its arrival, that is, before at latest the middle of the La Tène II period. The La Tène II pottery here is all of early type, and curvilinear patterns are absent, though the occurrence of the swag design at Worthy Down shews that they were present in the immediate neighbourhood before the period ended about 50 B.C. with the appearance of the Belgae.

The small quantity of this early La Tène II pottery compared with Hallstatt - La Tène I type indicates the same conclusion, namely that the occupation, which may well have begun in the 6th century B.C., is not likely to have lasted very long into the 2nd.[1]

1. See further below, pp. 138-9 and 169.

OBJECTS OF CHALK (Fig. 15, 1-2)

N.B.—Measurements are here given in centimetres: they can be ascertained in inches from the illustrations.

1. Half of chalk disc, with somewhat splayed central perforation, ornamented on both sides with five roughly-cut concentric grooves.
Diameter of disc, 10 cm. Thickness, 2.4 cm.
„ of perforation, 1.8 cm.
Surface of Entrance roadway.

Similar chalk or stone discs, apparently too large for spindle-whorls, and too light for loom-weights, have been found on various sites, but they seem regularly to be undecorated (*All Cannings Cross*, pl. 22, 4), and much more roughly made than this specimen. See p. 28, *ibid.*, where use as bow-drill steadiers is suggested, which seems less likely in the present case. Other suggestions are use as a pot-lid, the perforation being for a knotted thong as a handle, or that the disc was threaded on to the string or thong suspending eatables from the roof, to prevent rats or mice getting at them from above. The presence of ornament on both sides of this disc makes a satisfactory theory harder to arrive at.

2. Unshaped lump of chalk with a roughly picked hollow in the top, the tool-marks in which are still visible.
Length, 12.5 cm. Width, 10 cm. Thickness, 4.5 cm. Depth of hollow, 2.3 cm. Pit K.

The shape suggests the chalk cups or lamps, well known from Neolithic flint-mines: rather similar cups, but with pierced handles, have been found at Grime's Graves, associated with Hallstatt period pottery (*Proc. Prehist. Soc. E. Anglia*, IV, p. 192: drawings kindly lent to the writer by Mr. G. C. Dunning); the present example may be classed with them, but bears no signs of use and is probably unfinished. Two cups of the Early Iron Age (probably Hallstatt - La Tène I) from The Trundle afford a closer parallel (*Suss. Arch. Coll.* LXX, p. 62, pl. XVI, 176-7).

SADDLE QUERN (Fig. 15, 3)

The quern is of sarsen, blocks of which must have been plentiful on this as on other parts of the chalk downs. Its sides and bottom are roughly hewn, and the smooth working face is gently concave.
Length, 37.5 cm. Width, 26 cm.
Pit W.

This, the earliest used type of quern, only began to be replaced by the rotary quern after about the middle of the Early Iron Age in Britain. Both types were found at Fifield Bavant (*W.A.M.* XLII, p. 461), but at Liddington there were 21 saddle quern fragments to one rotary (*ib.* XXXVIII, p. 579),

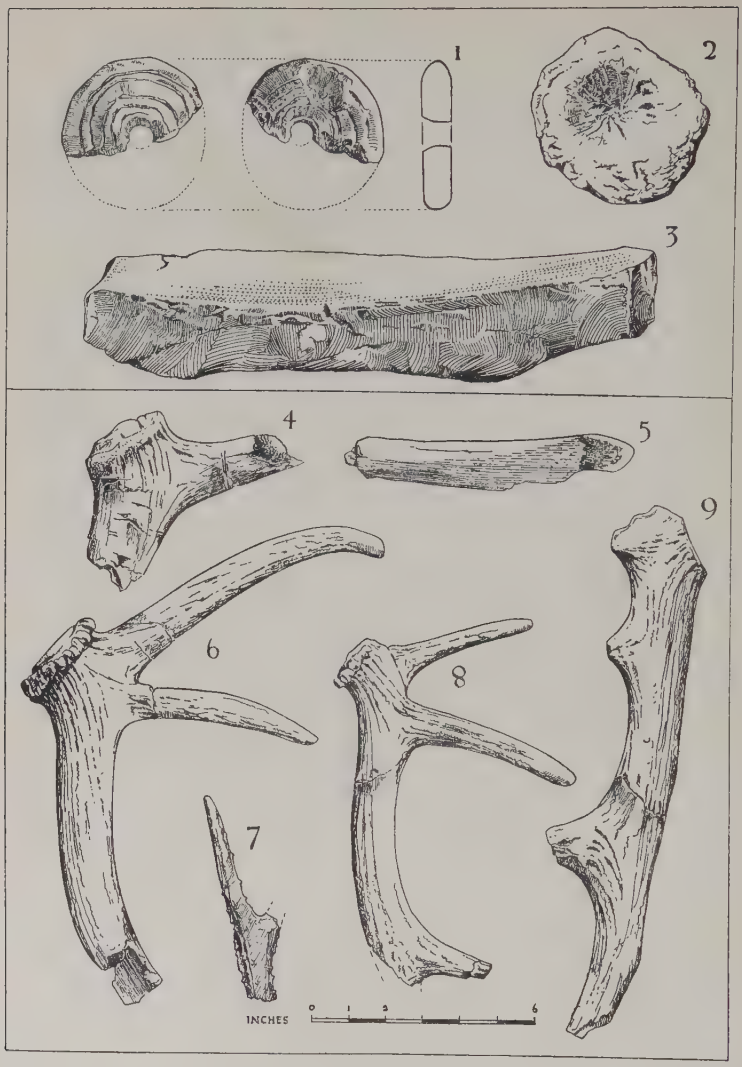

FIG. 15.
Objects of Chalk, Sarsen, Bone, and Antler (pp. 123-6).

and at Swallowcliffe saddle-querns only (*ib.* XLIII, p. 88), as also at All Cannings Cross, while at sites like Hunsbury, Meare, and Glastonbury, where occupation is mostly later, the rotary type was the rule (*All Cannings Cross*, pp. 18, 28-9).

OBJECTS OF ANTLER (Fig. 15, 4, 6-9)

4. Burr of antler of red deer (*cervus elaphus*) with adjacent portions of beam and brow tine: much worn, and covered with saw and knife cuts, having apparently been used for testing the sharpness of metal blades. Pit Z.

A similar piece was found at Fifield Bavant (*W.A.M.* XLII, pl. X, 4, with p. 481), with a shallow hole and a cut on one face, and a sawn groove across the burr: cf. *All Cannings Cross*, pl. 14, 1.

6. Part of beam of red deer antler with burr and brow and bez tines: signs of wear on the tips. Pit S.

Perhaps a broken pick (see below), but a similar piece from the Caburn (*S.A.C.* LXVIII, pl. VIII, 53), with the apparent remains of an attachment where the beam was broken off, was thought to be a haft for a knife or saw in course of manufacture; the tips of the tines were unworn (*ib.*, p. 25).

7. Small antler fragment with hardly any signs of wear on the tip of the tine. Pit S.

8. Piece of beam of red deer antler with burr and brow, bez and trez tines: the tips worn. Pit S.

Perhaps a broken pick (see below).

9. Long piece of beam with burr and tines sawn off. Pit S.

Perhaps an unfinished haft.

Several smaller fragments were also found in Pit S and one in Pit Z. Two sawn pieces also came from the midden by Pit B.

See H. W. Sandars, "On the Use of the Deer-horn pick," in *Arch.* 62, pt. 1, p. 101 ff.

The implement is best known from Neolithic flint mines, and is normally formed by removing all the tines except the brow, which thus formed the point of the pick: however, examples like nos. 6 and 8 are known where the bez tine was also left in place (*op. cit.*, pl. XVI, 1). But it cannot be considered as exclusively a mining tool: it must have been used in agriculture and for all kinds of digging in the Early Iron Age no less than in earlier ages, presumably chiefly the sinking of pits and the erection of earthworks. No doubt all the prehistoric works on the Hill were carried out with such picks and scapulæ of *bos longifrons* as shovels, as well as with corresponding tools of wood: the use of bronze or iron is more open to doubt.

Picks of antler continued in use in Romano-British times, and have been found at Silchester (*Arch.* 61, p. 214), and the village at Woodyates (Pitt-Rivers, *Excavations* III, p. 135).

OBJECTS OF WORKED BONE

(Fig. 15, 5 : fig. 16, B. 1-3)

Fig. 15, 5 (B. 4). Rib-knife, made from rib of *bos longifrons*: handle broken and unpolished, blade short and well polished.
Length, 19.5 cm. Pit S.
Such knives of this period are easy to parallel: e.g. *All Cannings Cross*, pl. 7, 2 and 4.

Fig. 16, B. 1. Polished bone pin.
Length, 10 cm. Diameter, .5 cm. (irregular section).
Found near the Chapel: not certainly Early Iron Age, but resembles *All Cannings Cross*, pl. 6, 18.

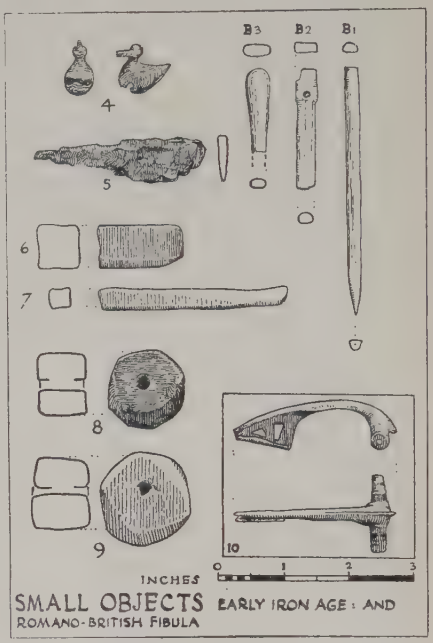

FIG. 16.
Various small objects (pp. 126-35, 139).

B. 2. Part of polished bone needle of oval section: rectangular head, circular eye. The broken end of the shaft has been re-polished, and the object used for some other purpose in its present state.
Length, 4.5 cm. Section of head, 1 × 7 cm.
Outside E. wall of Chapel: not certainly Early Iron Age, but though many needles of that period have oval eyes, some have similar round ones, e.g. *All Cannings Cross*, pl. 6, 16, 19, 21.

B. 3. Head of polished bone pin of oval section, the shaft snapped off.
Length, 3.5 cm. Section of head, 1 × .5 cm.
Found near domestic rooms at N.E. corner of Chapel: not certainly, but quite possibly, Early Iron Age.

The scarcity of objects of worked bone is remarkable, considering the numbers found on other Early Iron Age sites. Weaving-combs and gouges, for instance, are conspicuous by their absence.

BROOCHES (Pl. IX, 1-2)

No brooches were found of the period of the settlement, but finds on other sites make it certain that the prevalent type must have been that of La Tène I, which is fully discussed by Dr. Cyril Fox in *Arch. Cambr.*, June 1927, pp. 67-112. In the complete list which he there gives, two examples (nos. 48 and 46), both of bronze, come from the immediate neighbourhood of St. Catharine's Hill, and are accordingly here illustrated.

No. 1 was found on Twyford Down, about ¼-mile S.E. of the hill (see above, fig. 3 and note, p. 5), and as the whole Down is covered with lynchets which may with reason be attributed to the inhabitants of the hill settlement, the brooch may safely be considered as belonging to them. Its recurved foot is unhappily missing, but it may be classed under Dr. Fox's phases A or B, and thus perhaps belongs to the earlier rather than the later part of the period during which the type was in use, possibly to the 4th century B.C. Along the top of the bow runs a groove and dot pattern, and the spring, which consists of two coils on either side of the bow, is wound round a peg of bronze wire. The brooch is in the Winchester City Museum, and the writer is indebted to the Hon. Curator, Mrs. E. E. Wilde, for this photograph.

No. 2 was found below Winchester High Street (see above, fig. 3 and note, and below, p. 182). It is described and illustrated as fig. 11, p. 80, in Dr. Fox's paper, and the block has been very kindly lent for reproduction here.

Some remarks on the significance of the distribution of this type of brooch will be found below, pp. 158-9.

BRONZE FIGURE OF A BIRD

(Fig. 16, 4: pl. IX, 3)

The figure is in cast bronze, and resembles a duck, with a straight bill and practically no neck. In the fore part of the stomach is a roughly-shaped slot, .4 cm. in width and greatest depth, which has evidently served for an attachment, possibly to a bronze vessel or ornament, or more probably to a brooch. Length from tip of bill to tail, 2.4 cm. Found unstratified near Ditch 1.

Though it is regrettable that the figure was not found in satisfactory association with other material belonging to the settlement, it is beyond doubt to be connected with it, and in fact forms a most interesting link between the culture of the inhabitants and that of Central and Southern Europe in the Hallstatt period. The type indeed has a longer history, for moulded representations of birds first occur well back in the Bronze Age in the Aegean area, where their origin as cult-objects may be perhaps located. Properly speaking, a distinction should be drawn between dove-like figures, as associated in the Mycenæan period with female figures (the so-called

'dove-goddess'), and usually long-necked, long-beaked figures suggesting water-fowl (Hoernes-Menghin, *Urgeschichte der bildenden Kunst in Europa*, 1925, p. 524), but in considering the development of either type too rigid a typology is inadmissible, as many later examples from various regions of Europe have no very pronounced features, and German archæologists often describe them as 'doves or ducks.'

The long-necked water-fowl is associated with sun-worship, and as such is found widely spread over Europe from the Middle Bronze Age onwards. The myth, correlative to that of the sun's chariot, of the bark with its swans in which he returned eastwards by night on the stream of Ocean has been traced by Déchelette over a large area of Europe (*Revue Archéologique*, 1909, I, p. 305 ff.: *Manuel*, II, p. 413 ff.), and figures of birds, no less than those of horses, and images of the solar disc with its derivatives such as the wheel and the swastika, can fairly generally be connected with the prevalent cult of the sun.

Whether or no this is the case with the bronze flesh-hook from Dunaverny Bog, Ireland (*B.M. Bronze Age Guide*, p. 103 and fig. 109), which is surmounted with bird-figures both long-necked and neckless, it is certainly true of a more famous class of bronzes, the wheeled cauldrons found occasionally in Northern and Central Europe: the remarkable one from a Late Bronze Age grave near Skallerup, Denmark (*A.U.H.V.* V, p. 210), has a pair of figures of the 'waterfowl' type mounted both before and behind, and evidently these cauldrons are a special variety of the large class of 'bird-chariots' which have a very wide distribution and belong to the same symbolism.

In the Hallstatt period, in Central Europe, bird-figures occur on every kind of object (Déchelette, *opp. citt.*), though we cannot be certain how conscious was the tradition of cult-association: we are here closer to the origin of the St. Catharine's Hill specimen, and plate IX therefore shews a series of rough sketches to illustrate various leading points. No. 4, taken from an elaborate bronze vessel from a grave of the 8th century B.C. at Hallstatt (von Sacken, *Grabfeld von Hallstatt*, XXII, 3 b) shows the typical 'swan' form with long curving neck and beak: it is, though often modified, the commonest form of the period, and is especially frequently represented in relief on bronze vessels, particularly in its traditional association with the conventional sun-disc (e.g. *A.U.H.V.* V, taf. 56, 1025, 1029; II, iii, 5, 4). With the degradation of the type in this form, which

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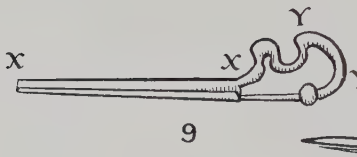

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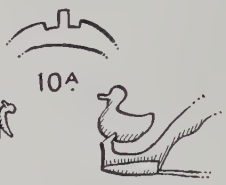

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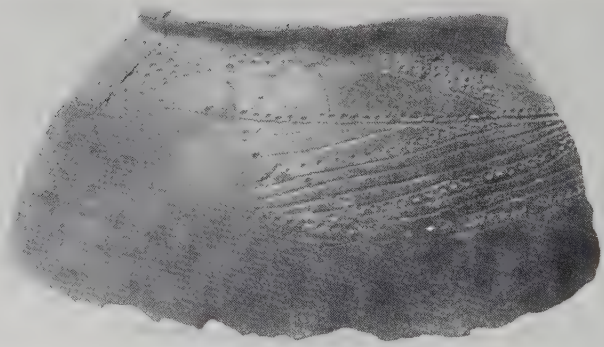


SCALE FOR NO. 12 0 1 2 3 4 INS.

1–2. Bronze brooches (p. 127).
3–11. Bronze bird-figure with explanatory diagrams (pp. 127-33).
12. Pot R 10 (see fig. 14 and pp. 119-20).

can ultimately be seen in the incised S-pattern on Iron Age pottery from the western limit of the Celtic world (Leeds in *Arch.* 76, pp. 230-4), we are not here concerned, as the characteristic and longest surviving feature is the long curving neck, which is absent in our specimen. Nor need we discuss the numerous cases where the head and neck only of a bird of this type is used as a decorative terminal or pendant, and the figure is not a separate casting. Amid a very large number of less distinctive whole figures from many Central European sites, short-necked forms occur, and the distinction has no chronological significance (*e.g.* both types on one object, in this case 7th century: *Pamatky Arch.*, Prague, XXI (1905), p. 638); but no. 5, from a crescent brooch in a grave of the 7th - 6th century B.C. at Hallstatt (von Sacken, *op. cit.* taf. XV, 1) is of a type suggesting the dove, and neither it nor no. 6, from the lip of an 8th century bronze dish (*ibid.* taf. XXIV, 4), bears much resemblance to the St. Catharine's Hill figure, which is indeed much more like a duck than most of the Central European bird-figures, *e.g.*, also those on an ornament from Thalling, Upper Austria (*Mitt. der Anthrop. Gesellschaft in Wien*, LVI, p. 354, abb. 3, d). Further, the latter are always attached, whether to a bronze vessel or ornament, or as in one case from Gemeinlebarn, Lower Austria (*Mitt. Prähist. Commission, Wien*, I, p. 60), to a clay vase, by means of a peg or rivet, sometimes quite long (*e.g. ibid.*, p. 57), cast in one with the body, and representing the bird's legs.

Nowhere is there anything like the slot attachment of the St. Catharine's Hill bird.

It is possible to imagine that the slot was made to fit on to the rim of a bronze vessel, but it is placed at such an angle that it must have been much everted if the bird was to sit level, and in the absence of all parallels this must at present be considered a risky theory, the more so as there is no appreciable horizontal curvature in the slot, so that the presumed vessel would have been impossibly wide.

In fact, Central Europe, in spite of its great wealth of such material, seems not to have produced any example very closely analogous.

Contemporary Italy also, in many of its various culture-provinces, produced a very large number of objects ornamented with bird-figures in the same conventional tradition, not only embossed on bronze vessels like the well-known situlae, but

also cast in the round. There are many examples of decorative terminals of bird's head form, as on the attachments of the well-known Etruscan spits, but complete figures are also very numerous: rather indeterminate forms are prevalent, some of which are clearly meant for doves (*e.g.* those attached to a female figure forming the handle of a toilet-implement from Novilara, Picenum: Mac Iver, *Iron Age in Italy*, pl. 25, 8: Montelius, *Civilisation primitive en Italie*, pl. 148, 13; and from Villanova: *ibid.*, pl. 91, 1); but it is in the decoration of brooches that forms most analogous to our specimen occur. To the Corsini type, most properly Villanovan, belong some of the most splendid products of Etruscan goldwork: the typical form of bird mounted on such is shown in outline as no. 7 (from a photograph in the British Museum), which bears some likeness to our bird, as does no. 8 from the Marsiliana fibula (Mac Iver, *Villanovans and Early Etruscans*, pl. 35, 1). There are many such ornate brooches: the rough sketch (no. 9) gives some idea of the type of which they are elaborate examples: bird-figures might be mounted in rows on the elongated foot (X . . . . X) and on the serpentine bow (Y . . . . Y). The variants of the serpentine brooch in Italy are of course numerous (*e.g.* von Duhn, *R.V.* 'Fibel,' B, taf. 110-13), and Montelius gives another example of bird-decoration: *op. cit.* ser. A. pl. XIX, 268, so that we have here a possible origin for our figure; however, reasonably close analogies in bronze to the actual form required do not seem to be forthcoming, the peculiar slot-attachment, in particular, being as yet unparalleled, and there is another brooch-type, also predominantly Villanovan, which will perhaps better repay attention.

This is the plain bow-brooch, in the development of which the leech and boat type are phases. Some variants of this are ornamented with bird-figures (von Duhn, *R.V.* 'Fibel,' B, taf. 108, 134) and belong to the Arnoaldi period (750 or 700 to 500 B.C.) at Villanova: Montelius, *op. cit.*, ser. B. pl. 90, 8 (*cf.* S. Italian exx. *ibid.* A. pl. II, 16, pl. V, 36,7 and the variant 35); the sketch no. 10 shews the arrangement.

But though parallel forms to the St. Catharine's Hill figure might well be found in this series, it generally has birds and bow cast all in one, which of course prevents further comparison. Indeed, many brooches exist with transverse ribs on the bow (as no. 10 A), which were certainly intended to retain some ornament, but the idea that it was to fit one of these that the

slot was made must be rejected, as it is placed at such an angle that the bird, if so mounted, would practically touch the bow with its bill: it is also a good deal too big for the average size of these brooches.

It is more likely that the bird was mounted on the foot of a brooch with a returned tip foreshadowing the knob of the Certosa type: how such an attachment would fit the slot at just the required angle is shewn in the sketch no. 11. Brooches with bow of animal form, with foot terminating in a bird-figure, occur at Sta. Lucia on the Isonzo (Marchesetti, *Scavi nella necropoli di S. Lucia*, tav. XX, figs. 8, 9, 10, 12): Mac Iver (*Iron Age in Italy*, p. 59) doubts Marchesetti's dating for this cemetery, but a date about 500 B.C. may be allowable for these brooches; the Sta. Lucia culture is related to the Villanovan, and has a distinctive character connecting it with the Comacine round the N. Italian lakes (Mac Iver, *ibid.*, p. 60). There is thus quite a possibility of tracing our bird to N. Italy: but it must be emphasized that no exact parallel has been found, though analogies are closer than in Central Europe.

The suggestion illustrated by no. 11 is due to Dr. Adolf Mahr, now of Dublin and formerly of Vienna, for whose opinion and for certain of the above references the writer is much indebted. Brooches (*e.g.* Hoernes in *Archiv für Anthropologie* 23, taf. IV, 39) recalling the type proposed seem at Sta. Lucia to be (though presumably earlier typologically) contemporary with those with returned foot formed like a bird's head (*ibid.* 16, 41, with p. 625), which in N. France occur at Les Jogasses, a 'Final Hallstatt' site closely linked (see below, pp. 156-7) with the All Cannings Cross culture represented on St. Catharine's Hill (*Revue Archéologique*, ser. 5, tom. 26, p. 123, fig. 15, 106-7): the date here too is about 500 B.C., or a little before.

A rather earlier dating is conceivable, but the close of the Hallstatt period is in fact the likeliest for the St. Catharine's Hill figure.

No such cast bird-figures, of whatever precise variety, occur in Europe N.W. of the middle Rhine, but an example from that region illustrated by Lindenschmidt (*A.U.H.V.* III, iii, 2, 7) suggests another chronological point. It was found with a 5th century beaked flagon shewing a stiff palmette, probably in a grave like that of Armsheim: it is 30 mm. long and has engraved wing-feathers and eye, which with its shape differentiate it from the St. Catharine's Hill bird, and from the bulk

of those others we have been considering. A further clue to the development of the type in this century is provided by the two beautiful decorated bronze flagons recently found at Bouzonville in Lorraine and now in the British Museum, which have just above the spout a small bird-figure, with similarly engraved feathers, etc., and eyes socketed for inlay, riveted down so as to form part of the general decorative scheme of the vessel. These flagons are Celtic products of the middle of the 5th century, and are the finest work of the initial period of the development of La Tène art, in which figure-representation became rapidly more stylized and soon really very rare, so that the distinction from the bronze-work of the preceding age, in which plain bird-figures are frequent and characteristic, is very marked (*cf.* Hoernes-Menghin, *Urgeschichte der bildenden Kunst in Europa*, pp. 561-5, and Déchelette, *Manuel* IV, p. 1013 ff.).

These engraved bird-figures mark the beginning of this tendency, and the rare examples we have after the middle 5th century are, if Hallstatt survivals, at least wholly conventionalized in the La Tène manner, and are seldom separate castings. For this effect on the 'Final Hallstatt' type of bird-headed brooch, see *e.g.* Déchelette, *Manuel* IV, p. 754, fig. 533, 5, 7, 8, 9; similarly, the style of the bird-ornamented Marne torcs illustrated *ibid.*, p. 805, fig. 563 (*cf.* p. 842, fig. 584) is unmistakeable: see further Déchelette's remarks (*ibid.*, pp. 806-7, and II, p. 464 ff.) on these survivals, and Pič, *Hradischt de Stradonitz* (Déchelette's translation), col. 63, with note 96 and pl. XX, 22, also 1-5, 14, 16, and extremely degenerate exx., *ibid.*, pl. XI, 9, 24. The St. Catharine's Hill bird stands before the beginning of this La Tène style of dealing with the survivals of its type: it cannot have been made in Celtic Europe or imported from beyond the Alps very much after the beginning of the 5th century at the latest.

Yet, as we have seen, the brooches which have so far been found to characterize the British culture exemplified on the Hill are of the La Tène type, and the accepted initial date for La Tène I brooches is 450 B.C. But this is approximately the date of the Rhenish and Bouzonville examples of bird-figures which we have seen to shew an early La Tène differentiation and must be later than the period of the St. Catharine's Hill type. The latter is emphatically pre-La Tène, and thus gives us evidence that La Tène I brooches are not the earliest bronze objects which can be associated with British culture of the

All Cannings Cross phase; further, as the bird is more likely to be from a brooch than a bronze vessel, and from Italy than Central Europe, association at once suggests itself with the various pre-La Tène brooches, etc., of demonstrably Italian origin which have been found in Britain. On these see Ridgeway and Smith in *P.S.A.* XXI, p. 97 ff., also *Ant. Journ.* IV, no. 1, p. 50, and Fox, *Arch. Cambr. Reg.*, p. 72 ff. Italian brooch types allied to those considered above certainly occur, and though some may have entered the country as 'antiques' in Roman and perhaps even in modern times, and no discovery has as yet been made really under test conditions, yet the Egyptian scarab of the XXVIth dynasty (late 7th—6th century B.C.) found with the Alton brooches, and the depth in undisturbed gravel at which the Weybridge bucket (Venetian, 7th century B.C.) was found, may be added to general considerations in favour of contemporary Mediterranean trade as arguments for seeing evidence of this in many isolated specimens. All Cannings Cross itself produced a pre-La Tène swan-neck pin (pl. 21, 1), and the occurrence of our bird-figure on a site similarly known to be occupied at least at the end of the Hallstatt period, and not in Roman times, cannot help strengthening this contention. Imported the figure certainly was, for as we have seen there are no analogies north-west of the middle Rhine. Whether the immigrant folk who founded the settlement brought it with them from the Lower Rhine or wherever exactly in that latitude they came from, or whether it was imported subsequently, must remain uncertain, but an Italian origin would anyhow shew the work of commerce.

To sum up, we have here an ornamental bird-figure, of a type originating as a cult-object in the Bronze Age and most prevalent in the Hallstatt period, which is clearly earlier than the beginnings of La Tène art; it was mounted in an unexampled manner, just possibly on a bronze vessel or other object, more probably on a brooch, and while an earlier date is not impossible, consideration of the present probabilities points to the latter part of the 6th century B.C. as its date, and as its origin to N. Italy, whence it must have been brought all or part of the way in the course of trade.

OBJECT OF IRON (Fig. 16, 5)

Tang and part of blade of knife, much corroded.
Length, 6.8 cm. Width of blade, 1.8 cm.
Pit A, not far below surface level.
This is clearly the remains of a knife like *All Cannings Cross*, pl. 20, 13-14.

Though a few scraps occurred, there was no other recognizable iron object which could confidently be ascribed to the period of the settlement.

This, coupled with the scarcity of worked bone, was a somewhat surprising disappointment.

Flint tools were absent, but are anyhow not necessarily characteristic of this culture (*W.A.M.* XLIII, p. 87); it is allowable to guess that iron tools were valuable enough not to be readily abandoned, though workable ore is present 20-30 miles away on the Surrey and Sussex borders of Hampshire.

Pieces of iron pyrites which may have been used with flint for striking fire, were quite often found.

WHETSTONES (Fig. 16, 6-7)

6. End of whetstone or hone of ferruginous sandstone (probably from the Greensand formation): roughly rectangular section.
Length, 3.5 cm. Section, 1.8 × 1.3 cm.
The sandstone consists of quartz grains cemented by limonite (= hydrated oxide of iron), and commonly occurs as a 'pan' overlying deposits of sand. (Report kindly submitted by Dr. W. F. P. Mc Lintock, Curator of the Geological Survey and Museum, Jermyn Street). It must have come from the Greensand south or east of the chalk plateau.
Entrance, unstratified.

7. Broken thin whetstone or hone of micaceous schist: roughly rectangular section: the surviving end has a slight depression.
Length, 7.4 cm. Section. .7 × .5 cm.
Surface soil over S. Transept of Chapel: some sherds of Early Iron Age pottery were also found here, and the whetstone may perhaps tentatively be given a similar date.

Whetstones of this period are seldom carefully shaped (*All Cannings Cross*, p. 27), and though some at Swallowcliffe have been described as 'beautiful' (*W.A.M.* XLIII, p. 88), there is as a rule no comparison with the carefully-shaped Bronze Age types (see below, p. 181).

SPINDLE-WHORLS (Fig. 16, 8-9)

8. A barrel-shaped whorl of brown sandy pottery.
Diameter, 3.2 cm. Thickness, 2.8 cm.
Pit Z.
All Cannings Cross: pl. 25, 3; Fifield Bavant: *W.A.M.* XLII, pl. XIV, W 24.

9. Circular whorl of chalk, rather worn.
Diameter, 3.8 cm. Thickness, 2.3 cm.
From Pit U, which is not itself of Early Iron Age, but the contents of its filling were quite miscellaneous, and the form and ware suggest the period of the settlement.
Swallowcliffe: *W.A.M.* XLIII, pl. XIII, D. 13.

Though weaving must of course have been practised together with spinning, no loom-weights were found.

OTHER OBJECTS

There were a certain number of flint lumps which had apparently been used as hammer-stones or pounders.

Burnt flint 'pot-boilers,' as is usual on sites of this period, were common.

Tertiary pebbles which might have been used as sling-bullets occurred now and then: one was found high up in the Rampart make-up in Section 2. Small round flint pebbles which might have been similarly used were common.

There were one or two fossil echini, which perhaps served as charms, and have been found at Worthy Down and elsewhere: *H.F.C.* X, pt. 2, p. 184, with reff.

REPORT ON THE MAMMALIAN REMAINS

The animal bones and teeth discovered were submitted to Miss Dorothea M. A. Bate, of the Department of Geology, British Museum (Natural History), Cromwell Road, to whom the writers are much indebted for her reports.

The collection includes remains of six species of mammals, namely:—

Bos longifrons	-	Celtic shorthorn ox, Sheep or goat.
Sus sp.	-	Pig.
Equus caballus	-	Horse.
Cervus Elaphus	-	Red Deer.
Canis sp.	-	Dog (or wolf).

Remains of *bos* are more plentiful than those of any of the other species, the next in order of frequency being sheep or goat, pig, and horse. There seems to be no indication of the presence of more than one species of *equus* or of *bos*. Nearly all the bones are broken and there are very few specimens of any length, with the exception of a mandibular ramus and some innominate bones of *bos*, and two cannon bones of *equus*.

A certain number of the bones have been deliberately sawn up, and some of the long bones have been split longitudinally for the extraction of the marrow.

Bones both of old and young individuals are represented, but though the latter were numerous, they do not preponderate in the whole collection. The red deer is represented by some antlers and few other remains. The scanty remains of *canis* indicate an animal about the size of a large Irish terrier.

All the remains of *equus* indicate a horse of small size, though two complete hind cannon bones are the only bones which admit of definite comparison. These prove to be slightly stouter than the corresponding bones of a New Forest pony in the British Museum collection. The specimens from St. Catharine's Hill have a length of 226 mm. and 245 mm., with a width at midshaft of 28 mm. and 29 mm. respectively. These measurements do not fall into the length-width index given by Professor Cossar Ewart for his 'plateau' or 'forest' type. Should the proportions of the two specimens from St. Catharine's Hill be confirmed by further material, it might perhaps indicate that they represent a mixed type.

The deposit of bones evidently thrown into Pit K when half silted up (see above, p. 89) includes remains of at least one immature and two adult specimens of *bos longifrons* with short horn-cores and light limbs. There is a nearly complete, but broken, skull of one adult, and the palate and cheek dentition of another. There is also an imperfect skull of a young animal, and portions of the upper jaw still retaining several of the dentition as well as some of the permanent cheek teeth.

The finds of mammalian remains made in all parts of the site have been noted as they occur in the detailed description of the excavations.

OYSTER - SHELLS

A number of these, some of them burnt, were found in association with remains of the settlement, and though Mr. H. S. Toms has contended (*S.A.C.* LXVII, p. 76) that the eating of the oyster was introduced into Britain by the Romans, the pre-Roman occurrence of shells on this site has other parallels (*e.g. All Cannings Cross*, pl. 26, 13), and the details of their discovery at Caburn (*S.A.C.* LXVIII, pp. 28, 49) and The Trundle (*ibid.* LXX, pp. 65-6) leave no doubt on the matter.

REPORT ON THE CHARCOAL

Specimens of the charcoal from the cross-sections of the Rampart and Ditch and from the Entrance were submitted to Mr. J. Cecil Maby, B.SC., A.R.C.S., F.R.A.S., of the Dept. of Wood Structure and Timber Physics in the Forest Products Research Laboratory (Imperial Forestry Institute), Oxford. His report is here given in tabular form. Great difficulty was experienced in sectioning the material, owing both to the damp condition of the charcoal and its inherent hardness and brittleness, and consequently some uncertainty attends his identification of some of the samples. The writers desire to acknowledge their gratitude for his patience and skill.

Sample.	*Where found.*	*Wood.*	*Remarks.*
1.	Section 2, old turf line under Rampart: p. 20 and fig. 4.	Unknown.	Material too poor.
2.	Section 3, Ditch, chalk silt (stratum 2): p. 26 and fig. 4.	Unknown.	Material too poor.
3.	Section 4, occupation-layer on surface of earlier bank flanking Entrance on N. side: p. 33 and fig. 4.	Ash (?), *fraxinus excelsior.*	
4.	Horizontal revetment-beam *in situ*. S. side of Entrance, between Holes 7 and 8: p. 35 and fig. 5.	Ash (?). *fraxinus excelsior.*	
5.	Section 8, corner-post of revetment of N. Bay in Entrance, standing in Pit V: p. 42 and figs. 5, 6.	Ash, *fraxinus excelsior.*	
6.	Collapsed revetment timbers lying on floor of N. Bay in Entrance: p. 51 and fig. 5.	Oak, *quercus sp*: either *q. robur* or *q. sessiliflora.*	
7.	Section 4, post in Hole 11: p. 51 and figs. 4, 5.	Ash, *fraxinus excelsior.*	
8.	Section 4, revetment beams fallen across dark silt in S. Bay in Entrance: p. 51 and figs. 4, 5.	Oak, *quercus sp.*	
9.	Another sample from burnt layer over dark silt in S. Bay in Entrance: *ibid.*	Ash (?), *fraxinus excelsior.*	Very close grown.
10.	Section 4, layer burnt by final fire on Entrance roadway surface near Hole 15: p. 64 and figs. 4, 5.	Ash (?), *fraxinus excelsior.*	Close grown.

SUBSEQUENT REMAINS

The description follows of the scanty remains belonging to the periods succeeding the termination of the settlement.

Late Celtic or Belgic Pottery (Fig. 17)

Fragments of the rims of two wheel-made vessels were found unstratified in the Area, entirely different from the pottery of the Early Iron Age settlement, but from their smooth rather soapy finish, together with their form, requiring a pre-Roman date. They probably belong to the early 1st century A.D.: at any rate to the period of Belgic occupation of the district (see below, pp. 170 ff). They are no evidence of habitation on the Hill in this period.

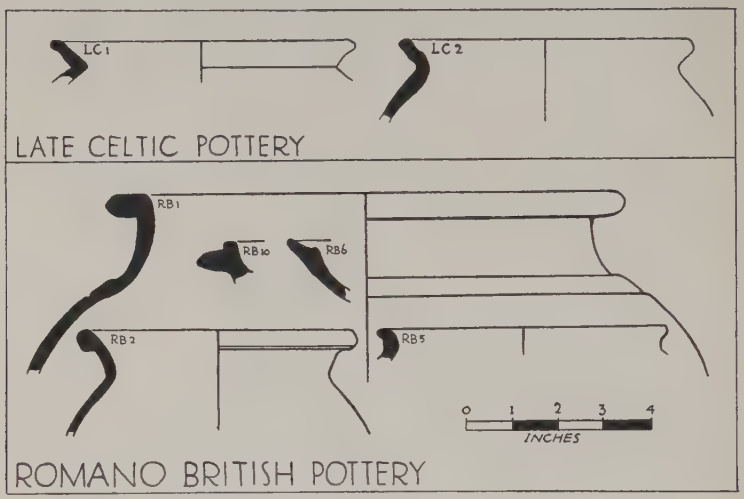


FIG. 17.
Pottery later than the Early Iron Age Settlement (pp. 138-9).

L.C. 1. Small piece of sharply everted rim of coarse but smooth brownish-grey jar: bulging shoulder beginning below.
cf. May, *Silchester*, pl. LXXVI, 3 (though with less shoulder bulge), which may be taken as contemporary.

L.C. 2. Four pieces of rim of similar jar, less sharply everted, and with narrower shoulder.
cf. May, *Silchester*, pl. LXXVIII, 2; which is not dissimilar and must be contemporary; also Casterley: *W.A.M.* XXXVIII, p. 104, pl. IV, 1, for the rim.

It is remarkable that no pieces of bead-rim pottery, which is far more characteristic of the period than this everted-rim type, were found; that the hill was certainly deserted during the century preceding the Roman Conquest will be further argued below (pp. 175, 188).

Romano-British Pottery (Fig. 17)

Pottery of the Roman period was represented by scraps only, and must not be taken as evidence of occupation. Except for one or two tiny fragments of plain Samian ware found on the surface of the Entrance roadway, all the finds were of coarse pottery of 1st—3rd century types. A few representative examples are illustrated.

RB. 1. Some few pieces of large grey jar, with heavy everted lip and debased cordon on shoulder.
1st century, perhaps early Flavian.

RB. 2. Rim-fragment of smaller grey jar of narrower shape, with coarsely beaded everted rim.
1st century, probably Flavian.

RB. 5. Small rim-fragment of bead-rim bowl.
1st century: the type hardly lasted out the Flavian period.

RB. 6. Very abraded fragment of small buff bowl, mortarium type.
Late 1st or early 2nd century.

The above, along with a small piece of a bulbous beaker of Trajanic type and a flanged dish-rim like RB. 10, were found unstratified on the Area surface.

RB. 10. Rim-fragment of grey flanged dish, 2nd—3rd century. Trial trench N. of Ditch 1. A similar piece was found in the upper silt of the Ditch in Section 2 and another small one on the Entrance roadway, along with a little piece of an everted jar-rim, apparently late 1st century.

About 10 small shards of indeterminate character came from the upper silt at the end of Ditch 4, representing some 4 pots.

Roman Bronze Fibula (Fig. 16, 10)

This was found on the Entrance roadway surface in Section 4: it is somewhat bent, and the pin is missing. It may be dated in the later 1st century A.D., and belongs to the common type developed from that of La Tène III. A similar fibula from Bitterne is in the Winchester City Museum (Dale Collection).

Roman Coin

Found in the Ditch, Section 3, in grey silt (see above, p. 26).

CARAUSIUS (A.D. 286-293). Æ. PAX AVG type. 25 mm.

Obv. Radiate draped bust to r. **(I) MP CARA(VSIVS P F AVG).**

Rev. Peace standing to l, holding r. olive-branch and l. cornucopiae.
(PAX) AV(G). F | O
(ML)

ML may be inferred in the exergue from the F O flanking the *rev.* figure, thus giving mint-mark of Londinium: may be dated about the middle of the reign. (Report kindly supplied by Mr. G. C. Brooke of the British Museum.)

cf. Cohen 222: Webb (*Reign and Coinage of Carausius*, 1908), 155, 1011: *Richborough* II, 4614-7.

Remarks on such significance as may be attached to these finds will be found below, p. 188.

THE EARLIEST IRON AGE CULTURE OF BRITAIN

THIS detailed survey of the pottery and other material of the settlement has shown, by means of the numerous parallels which it has been possible to draw with other sites, that we have here some of the leading features of the immigration that reached Britain from the Continent towards the middle of the first millennium B.C.

Its coming can hardly be called strictly an invasion, but rather the continued trickling of small groups, not, it seems, all of strictly the same origin, and each possessing or developing some degree of variation in its own character. Yet they had recognizable features in common, and their establishment in the south and east of the island marks the transition there from the Bronze to the Iron Age, and an essential and probably the initial stage in the bringing in of Celtic blood and speech.

This important turning-point in the pre-history of the country has only of recent years begun to be recognized in the archæological material with which we are concerned, and it cannot be said that there is more than a bare outline of agreement on many of the problems which it raises.

Still, the idea of quite a long transitional period of immigration in many scattered bands, related indeed though hardly homogeneous, forms a reasonably safe starting-point for the slight essay here attempted concerning the origins, distribution, and duration of this phase of culture.

Abercromby gave the first adequate recognition to the evidence for foreign penetration late in the Bronze Age afforded by sepulchral pottery (*Bronze Age Pottery*, vol. II, 1912). Broadly speaking, the characteristic Middle Bronze Age cinerary urn is his Type I, the purely native overhanging-rim type, derived from the old food-vessel, while the new forms, which he saw to betoken movement from abroad, belong to his Types III and IV. These consist chiefly of the classes of urns often called "Deverel-Rimbury," from the Deverel barrow and the Rimbury cemetery in Dorsetshire, and comprise (1) the barrel urn, slightly convex and decorated with raised mouldings often bearing finger-print ornament, (2) the bucket urn, cylindrical or nearly, with a raised fillet, usually finger-printed, about two-thirds of the way down, and (3) the globular urn with projecting lugs and decorated neck of truncated-cone shape. A distribution-map of these urns is given by Dr. Clay in his report on the

Woodminton barrows ;[1] they are thickest in Wessex, and sparser north-east of the Thames.

The suggestion made in the same paper[2] that the bucket type is not immigrant, but aboriginal and a degeneration of the overhanging-rim urn, has since been superseded in his report on the Pokesdown urn-field, where it is made[3] abundantly clear that all three classes were the product of Late Bronze Age invaders, who introduced communal interment in flat urn-fields or else secondary burial in existing barrows. The validity of proposed further distinctions concerning 'finger-nail' and 'finger-tip' ornament and the presence or absence of applied bands on pottery has already been scouted,[4] and as we shall find flint flaking a doubtful criterion of race in this connection,[5] the whole complex represented by these urns may be considered as immigrant.

They have indeed been claimed as Hallstatt in type, and the globular urn particularly recalls the Lausitz culture of Central Europe. The presence of close analogues in the Pyrenees suggests the arrival there of another wave of Central European invaders, and in fact the appearance of the Deverel-Rimbury urns in Britain, which Abercromby[6] dated to 700-650 B.C., introduces us to the whole question of the movements which from late in the second millennium B.C. were intermittently at work in Europe, and which did not end when the expansion of the Celts and the advance of the Germans brought those peoples into contact with the Greek and Roman world.

As far as this complex question affects the British Isles, the next important contribution was made by Crawford in 1922.[7] He contended that the invasion was more important than Abercromby allowed, that the invaders were Goidels, or Celts speaking a Gaelic tongue, that they were the first Celts to reach these islands, and that they came about 800-700 B.C. The chief evidence comes from bronze weapons and objects, mostly in hoards. While the rapier and the stop-ridged axe or palstave characterize the undisturbed native Middle Bronze Age which produced the overhanging-rim urn, socketed axes were competing with palstaves at the time of the invasion, and the socketed

1. *W.A.M.* XLIII, p. 322, pl. I.
2. *Ibid.*, pp. 319-322.
3. *Ant. Journ.* VII, no. 4, p. 465 ff., esp. pp. 482-4.
4. See pp. 104-6 above.
5. See pp. 148-9 below.
6. *Op. cit.* II, pp. 109, 113.
7. *Ant. Journ.* II, no. 1, p. 27 ff.

axe with 'vestigial-wing' ornament, which is the successor of the purely foreign winged axe, must have been brought in by the invaders; further, their typical weapon, the leaf-shaped sword of Central European origin, superseded the rapier. Of the other intrusive bronze objects adduced the most important is a type of razor, which is both associated in hoards with the bronze weapons already mentioned, and is also found in the small square earthworks on Cranborne Chase (see p. 79 above) along with examples of Abercromby's Deverel-Rimbury urns. Thus these urns with their finger-print ornament, the new bronze types, and the square earthworks, form a single invading complex, which Mr. Crawford traces to the Lake-Dwelling culture of the Western Alps. This culture came to an abrupt end during the earlier part of the Continental Iron Age, apparently at just the time (800-700 B.C.) required for the invasion of Britain.

Shortly afterwards, Peake's *The Bronze Age and the Celtic World* appeared, where by the recognition of distinct types of leaf-shaped swords the invasion theory is elaborated. The earliest group of these swords found in England and Ireland, mainly of Peake's type E, is attributed to the arrival in both islands successively of 'Celtic lords (*sc.* Goidelic Celts) and the bravest of their henchmen' (*sc.* Alpine Lake-Dwelling peasants) who left Central Europe between 1200 and 1175 B.C., and travelled by E. France or the Rhine.[1] The next, his type G, marks the appearance of the last of these lords and henchmen, as refugees after the destruction of their ancestral Lake-Dwellings about 900 B.C. by a fresh wave of Celts of Hallstatt culture from the Upper Danube, newly armed with iron swords and speaking a Kymric or Brythonic tongue which used P where the Goidelic used Q.[2] Though finger-printed pottery is supposed to characterize invasion 1 also, much of the Deverel-Rimbury group seems to be ascribed to this invasion 2, which is, broadly speaking, the equivalent of that proposed by Crawford. Lastly, after iron and the La Tène culture had appeared through commercial channels about 450, invasion 3 is the work of a later generation of the Kymric or Brythonic Celts, who had chased their Goidelic cousins east and north across Europe and arrived in Britain about 300 B.C.[3]

1. Peake, *op. cit.*, pp. 102-3, 129, 161.
2. *Ibid.*, pp. 101-3, 130, 164.
3. *Ibid.*, pp. 166-7.

The vision of completeness held out by Peake's book is perhaps a little previous, and we must next note further evidence produced by British archæology.

As long ago as 1915, the Hengistbury Head excavations had produced pottery which Mr. Bushe-Fox recognized as of Hallstatt character: much of it bore finger-print ornament, but it seemed largely superior in quality and different in form from the finger-printed urns ascribed to the Bronze Age (*i.e.* broadly speaking, the Deverel-Rimbury group), and obviously different from the later La Tène wares. This Hengistbury A class pottery was duly noted to resemble the presumably contemporary Hallstatt pottery of the barrow-cemeteries of the French Pyrenees, to be further noticed below, and a few analagous finds in S. England were also recorded.[1]

Chief among the latter was that at All Cannings Cross, near Devizes, the subsequent excavation of which by Mr. and Mrs. Cunnington has produced a mass of interesting and important material, published partly in 1922 [2] and fully in 1923.[3] The pottery is the same as the Hengistbury A class, but in the much wider range of types found appeared a close resemblance to the domestic wares found in the square earthworks of Cranborne Chase along with Deverel-Rimbury urns, and indeed with those urns themselves. Also, a bronze razor and part of a socketed axe serve to complete the link between this settlement—itself undoubtedly beginning in the Hallstatt period, as a swan-neck pin helps to show [4]—and the complex of new bronze types, finger-printed pottery, and square earthworks on which Crawford's invasion-theory was based. Thus the All Cannings Cross culture, which is properly Early Iron Age and has a fairly wide distribution, and the intrusive features of the Late Bronze Age, which have one wider still, have been hailed in some quarters as identical: Peake, too, assigned the settlement to his invasion 2.[5]

Now the All Cannings Cross pottery is derived by its discoverers [6] from the Lausitz type, present in Central Europe in the Late Bronze and Early Iron Ages, as is indeed strongly suggested by the furrowing, punch-marks, bosses, and dimples which in addition to finger-printing characterize the ware, and

1. *Hengistbury Head Report*, pp. 32-3.
2. *Ant. Journ.* II, no. 1, p. 13. Also *W.A.M.* XXXVII, p. 526 ff.
3. *All Cannings Cross*, the work here quoted throughout.
4. See p. 133 above.
5. *Op. cit.*, pp. 102, 130, 164.
6. Pp. 37-9.

which are all Lausitz features. Abercromby made the same suggestion for the globular urns of his Deverel-Rimbury group,[1] and as the Pyrenæan parallels both to this and the Hengistbury-All Cannings Cross wares noted above may be explained by assuming common origins for these types in Central Europe,[2] the identification of all the British Late Bronze and Early Iron Age material under review as belonging to a single Central European invasion seems thus far reasonable. But further evidence has been somewhat disconcerting. A find of definitely Hallstatt pottery at Eastbourne was published in 1922,[3] including pieces with a painted lozenge-pattern of clearly foreign origin, but all demonstrably fired on the spot. The pots were compared with the All Cannings Cross wares, with sherds of the Göritz sub-type of the Lausitz group found at Pulborough,[4] and with pottery from Park Brow, near Cissbury, which subsequent excavation, published in 1924[5] and 1927,[6] proved to be a most interesting site. It produced (1) a Late Bronze Age settlement of circular huts, with finger-printed pottery of the bucket-urn type as in the Deverel-Rimbury group; (2) an Early Iron Age settlement of rectangular huts, with superior finger-printed pottery of Hallstatt type analogous to that of All Cannings Cross, (3) a later La Tène settlement which lasted into the Roman period. The sequence of pottery showed two main points: first, a marked break and difference between a Late Bronze Age and an Early Iron Age culture, and second, undoubted continuity of the latter with La Tène culture, lasting into Roman times. Thus, whatever the origin of the Late Bronze people, with their finger-printed bucket-urns, the Hallstatt people, whose origins were traced to the Rhine and Central Europe, were the direct ancestors, at this site at least, of the La Tène people who became the subjects of Rome. The slight shifting of the settlement in La Tène times corresponds to no break in the pottery-sequence, and while the so-called Hallstatt - La Tène settlement was the direct begetter of the La Tène II - III and Romano - British settlement, it is sharply distinguished from the Late Bronze Age settlement. This is shown not only by the form of the huts, but, despite the finger-printing present in both, by the superior quality, the ferruginous

1. *Op. cit.* II, p. 48.
2. *All Cannings Cross*, p. 39. *Cf.* p. 150 below.
3. *Ant. Journ.* II, no. 4, p. 354 ff.
4. *P.S.A.* XXIII, pp. 376, 385.
5. *Ant. Journ.* IV, no. 4, p. 347 ff.
6. *Arch.* 76, p. 1 ff.

coating, and above all the sharp-shouldered form of the pottery, the last being a Hallstatt feature absent from the bucket-urn ware connected with the Deverel-Rimbury group. Other finds in Sussex, especially at Findon Park, Caburn, and The Trundle (see list below) have confirmed the Park Brow evidence, and a not dissimilar sequence of Early Iron Age pottery at Wisley, Surrey, was also published in 1924.[1]

Meanwhile Dr. Clay's report on the Woodminton barrows (see p. 141 above) had yet urged the identification of the Deverel-Rimbury sepulchral pottery and the All Cannings Cross domestic pottery in a single culture transitional between the Late Bronze and Early Iron Ages; his opinion in the modified form we have seen it attained in his Pokesdown report may be compared with Dr. Wheeler's paper on bronze implements from London,[2] where the introduction of the new bronze types discussed above is doubtfully attributed to successive parties of settlers or traders.

The next event was the unexpected discovery of coarse finger-printed pottery of undoubted Hallstatt type by Mr. F. G. Simpson at Scarborough, published in 1928.[3] It certainly betokens invaders, and is cruder and apparently earlier than the Early Iron Age ware at Park Brow; as above noticed,[4] the site is far outside the area of the Deverel-Rimbury group, and typological suggestions based on the features of that group cannot apply; however, it is by no means too far north for the Late Bronze Age hoards we have noticed, as the famous Heathery Burn hoard from Co. Durham is enough to show. The connection of the Scarborough invaders with the people responsible for such hoards deserves careful handling, for what little pottery the British Museum possesses from Heathery Burn makes interesting comparison with that from Scarborough. Whether or no the latter was produced, as Mr. Reginald Smith has contended,[5] by coerced native women for their new masters, this material from the northern limits of the intruding elements may be, in part at least, confidently traced to the Low Countries and the Lower Rhine.

The same culture in a rather later phase (= La Tène I) appears at Atwick in Holderness, though this was not recognized

1. *Ant. Journ.* IV, no. 1, p. 40 ff.
2. *Ibid.*, VII, no. 3, p. 294 ff.
3. *Arch.* 77, p. 179 ff.
4. See p. 104-5.
5. See p. 104 above.

at the time of the discovery there,[1] and again at the neighbouring West Furze lake settlement.[2] Further south, sherds of similar coarse pottery have occurred near Ingoldmells in Lincolnshire,[3] and in the Fen region the discoveries of Mr. Wyman Abbot at Fengate near Peterborough,[4] and the researches of Dr. Cyril Fox in the neighbourhood of Cambridge show similar but deeper penetration at the turn of the Hallstatt and La Tène periods by immigrants probably from Flanders and the Rhine, who made for our eastern coast and sailed to the Wash and up the Fen rivers.[5]

A settlement yielding pottery which shows Hallstatt influence but more strongly suggests the bucket-urn character ascribed to the Late Bronze Age has been discovered on the site of the Stone Age flint-mines at Grime's Graves, Norfolk.[6] This points, along with various finds of actual bucket-urns in East Anglia, to earlier immigration than that certified by Dr. Fox, though the transitional character of this whole phase is well shown by the bucket-urn from Colchester in which an iron spear-head was found.[7]

The furthest penetration inland of this East Coast movement or movements seems to be marked by some significant sherds of pottery from Loughborough,[8] and by the earliest types of pot from Hunsbury, Northampton; though as is well known, the main occupation there is later La Tène, the presence of coarse vessels with regular late Hallstatt features, including finger-printing, deserves attention.

The Thames estuary would naturally attract immigrants, and as well as various finds of the same Hallstatt-period pottery, in Kent and in Essex, notably at Walthamstow, Dr. Wheeler's recent discoveries at Old England, Brentford,[9] require especial notice, as the previous occurrence here of leaf-shaped swords, many other bronze weapons and implements including a remarkable razor, and skulls assigned by Sir Arthur Keith to the Alpine Lake-dweller group, recall to us once more Mr. Crawford's

1. *Man*, 1910, 48. The correct attribution of this site has been pointed out to the writer by Mr. G. C. Dunning.
2. *Arch.* 62, pt. 2, p. 591 ff.
3. Private information.
4. Specimens in Northampton Mus.
5. *Arch. Cambr. Reg.*, pp. 83, 118.
6. *P.P.S.E.A.* V, pp. 107-8.
7. Colchester Mus., no. PC 617: *cf.* Clay in *W.A.M.* XLIII, p. 321.
8. Information from Mr. C. A. Ralegh Radford, F.S.A.
9. *Antiquity*, vol. III, no. 9, p. 33 ff.

hypothesis of 1922 concerning invasion by refugees from the Swiss Lakes.

Further up the valley, more finds of pottery, including a notable pot from near Reading, attest penetration as far as the edge of the Cotswolds, and the new culture appears to some extent on the oolite ridge. But the people made themselves most at home on the chalk; they are traceable on the Chilterns, plentiful, as we have seen, on the Sussex Downs, and on the main chalk plateau of Wessex most plentiful of all. Many must have landed on the south coast, and the importance of the St. Catharine's Hill district has been emphasized in the Introduction; the Downs of Hampshire, Berkshire, and above all Wiltshire and the Dorset border were thickly populated. The western limit seems to be Ham Hill, near Yeovil, where before the better-known occupation by another Celtic people in La Tène times there was a settlement of makers of the familiar finger-printed Hallstatt pottery.

This gives us the main outline of the complex immigration which we have to account for; the distribution is given in detail below: meanwhile we are faced by the confusion of different theories of origin and date which have been brought forward. The diversity of opinion is the natural result of the diversity in the archæological material. It is difficult to identify the whole movement with that which brought in the new types of Late Bronze Age weapons, etc., for the distribution of hoards and of isolated objects such as leaf-shaped swords will not yet tally with that of either sepulchral or domestic pottery. Further, such objects, as we have seen in the case of the swords, may be divided into types of different dates, and at Birchington and Worthing hoards have been found placed in pots of definitely Hallstatt or Hallstatt - La Tène I character: these may be set off against the iron spear-head in the Colchester bucket-urn, and Crawford's paper on the Birchington and Worthing hoards [1] presents a strong case once more for identifying the Late Bronze Age and Hallstatt - La Tène I immigrant material as together part and parcel of the same invasion. Still the difficulties are far from being overcome, as is rather amusingly indicated by the pregnant discussion on Crawford's paper by Messrs. Peake, Bushe-Fox, Reginald Smith, and Dr. Wheeler.[2]

In Wilts and Dorset there can be no doubt that the people of the Deverel - Rimbury urns and late bronze implements

1. *Ant. Journ.* IV, no. 3, p. 220 ff. See distribution-list below, p. 167.
2. *Ibid.*, pp. 225-6.

used finger-printed domestic pottery, but the converse proposition, that all such domestic pottery and in fact the whole complex of our so-called Hallstatt culture is due to the Deverel - Rimbury urn people, may be supported by coincidences, which in Wessex indeed are suggestive, as Dr. Clay has shown in the papers quoted, but it will not fit the whole of the evidence any more than the precepts of Formal Logic.

At Park Brow the Late Bronze Age and Hallstatt - La Tène I cultures stand in sharp contrast, and though in the latter, as in the former, cremation was practised, the only cremation-burial found was in a small urn [1] of Hallstatt quality quite unlike a Deverel - Rimbury urn. In East Anglia the contrast is still more marked, for while cremation in Deverel - Rimbury bucket-urns characterizes the Late Bronze Age, the Hallstatt - La Tène I immigrants practised inhumation in barrows,[2] although here and elsewhere there is evidence for a few cases of cremation (see list below, p. 168). This matter of burial customs is of the first importance: both rites were clearly present among the various groups of Hallstatt - La Tène I invaders, but the evidence is terribly scanty; indeed, it is largely because the so-called Late Bronze Age has produced many graves and few habitations, while the case is just the reverse with the so-called Early Iron Age, that the identification of the two in Wessex came to be proposed. But though no graves of the All Cannings Cross people have been found, we shall find reason below to suspect that some of them inhumed, in which case, of course, all hope of identifying these with the cremating Deverel - Rimbury urn people instantly vanishes.

Still, the burial-rite criterion has yet provided no thoroughgoing distinctions, and the same is the case with another, namely, the flaking of flint for tools. It has been suggested that this was practised by the Late Bronze Age but not by the Early Iron Age people. Dr. Clay's contention [3] that in the Deverel - Rimbury group the bucket-urns do and the barrel-urns do not belong to a flint-flaking people at first led him to attach the former to the Middle Bronze Age natives: now that he has superseded this view one can only say that some of the Late Bronze Age immigrants flaked flint while others did not. As for the so-called Hallstatt - La Tène I settlements, flint is certainly absent normally except for pot-boilers and strike-a-lights,

1. *Ant. Journ.* IV, no. 4, p. 355, fig. 14.
2. Fox, *Arch. Cambr. Reg.*, pp. 76-79, 118.
3. *W.A.M.* XLIII, p. 321: cf. *Arch.* 76, p. 18 (Reginald Smith).

which do not count—*e.g.* at All Cannings Cross, Swallowcliffe, Fifield Bavant, St. Catharine's Hill, etc.,—but at Hengistbury Head, the original type-site for the pottery concerned, Mr. Bushe-Fox found "that on sites 2, 3, 30 and 31, where the greater part of this pottery occurred, a large number of flints showing the work of man was met with." [1] So again we seem only to have unenlightening local variation.

It is already only too clear what confusion has prevailed concerning the important movement of peoples which apparently brought the first Celts to Britain, and produced among so many others the settlement on St. Catharine's Hill. Crawford's and Peake's invaders, whether they came in one or several waves, are Q-speaking Goidels: Dr. Fox's invaders are P-speaking Brythons.[2] The Deverel-Rimbury and the All Cannings Cross peoples may or may not be identifiable. Late Bronze and Early Iron cultures are here merged, here distinct: some cremate, others inhume: some flake flint, others do not: skulls at Old England are Alpine and round, in East Anglia apparently long.[3] Dates fly about: 1200-1175, 900, 800, 700, 600, 500 B.C. and later have all been attached to one movement or another, or been claimed to serve for a majority; while Continental origins have fluctuated between the Pyrenees, the Swiss Lakes, Central Germany, the Rhine, Flanders, and the Netherlands, and the folk who relinquished these diverse spots for our shores figure variously as war-lords, traders, refugees, and cultural jetsam. Our provisional conclusion can only be, in all fairness to the distinguished scholars who have written on this intricate problem, that all of them are right—right, that is, in interpreting the evidence with which they have been immediately concerned, and that all the elements that have been detected, and perhaps more besides, went to make up the complex of immigration. Accordingly, we still have the notion with which we started, of an extended period of penetration by varied though generally related groups.

Two obstacles stand in the way of the further advance of our knowledge. Firstly, we have far too little evidence from our own country to enable us to sort out and define the connections of one group with another. Secondly, the Continental material is still incompletely worked out. It is clearly in the

1. *Hengistbury Head Report*, p. 33. For the flint industry associated with the Early Iron Age earthworks in Epping Forest, see Hazzledine Warren, *Essex Naturalist*, XXII, pp. 117-138.

2. *Arch. Cambr. Reg.*, pp. 86, 115.

3. *Ibid.*, pp. 114-15.

succession of fusions and mutual reactions of peoples in Central Europe that the origins of our immigrants must be sought, but links in the chain are as yet missing, and agreement is only beginning to be reached concerning the crucial region itself around the Alps and the adjoining highlands. Undoubtedly this is where the Celtic cradle, the *Urkeltikum* of German scholars, is to be placed, and in the long story that there leads up to the emergence of the Celtic stock, various parts were played before 1800 B.C. by native Alpines, Beaker peoples, Nordic intruders, and westward-moving folk rooted in the so-called Aunjetitz culture of Bohemia and the Danube, the vital Early Bronze Age dispersal-centre to which Hellenes, Illyrians, Italici, and Celts—all Aryan peoples—can apparently alike be traced. The successor of this last culture in the region centring on Silesia and Eastern Saxony is the Lausitz culture [1] which we have already mentioned in passing, and besides bringing about important developments over a large area of Germany, we also find its carriers making their way into the Celtic cradle, and causing some of the people of the West Alpine lakes to emigrate about 1200 B.C. to north-east Spain.[2]

Now it is these West Alpine folk that we have seen Peake referring to as "Celtic lords and their henchmen," and on the evidence of leaf-shaped swords he has given the same initial date, 1200 B.C., for their first invasion of Britain. But lack of similarity between contemporary finds in Britain and N.E. Spain will thus prevent our pressing at all closely this suggested early invasion of our shores. No doubt there were a number of irruptions, but to such trade is often a prelude, and we must recall Dr. Wheeler's handling of the possibility that trade was responsible, at least to begin with, for the introduction of leaf-shaped swords and the like. Such an early immigration must, in fact, for the present stand over.

Meanwhile the working of iron was beginning in the Eastern Alps, where in the later province of Noricum is the site of Hallstatt that has given the earlier Iron Age its name, and both Celtic and Illyrian peoples began about 900 B.C. to take to the long iron sword, typical of the unitary culture influenced by the Geometric art of Greece, that grew up to stretch from Austria along the northern edge of the Alps to Eastern France.

1. On this see Gordon Childe in *Antiquity*, vol. II, no. 5, p. 37 ff.

2. For a clear English summary incorporating this important event, newly established by Bosch-Gimpera and Kraft, see the latter's paper, "The Origin of the Kelts," in *Antiquity*, vol. III, no. 9, p. 33 ff.

It spread over much of the area of the South German urn-field folk of the later Bronze Age, who embodied the tradition of the Lausitz culture mentioned above, and in the course of its development also the Lake-Dwellings of the West Alpine people already noticed were abruptly destroyed. Both they and their destroyers can in some sense be called Celtic, and Peake at least has made the distinction between them that of Q-speaking from P-speaking, or Goidelic from Brythonic (Kymric) Celts. It is wise at present to avoid the tangled linguistic controversy involved, but the apparent distinction of some sort here is important, for it is this destruction of the Lake-Dwellings, about 800-700 B.C., which Crawford has urged to have brought about his important invasion of Britain.[1]

The exact identity of type which he has stressed between so many bronze implements from this country and the Swiss Lake-Dwellings is most striking, and the argument from the Swiss analogues to the finger-print decoration which appears in Britain with the Deverel - Rimbury urns is a suggestive one.

But as we shall see, there are other cross-currents to be considered, and in fact such pottery forms in some ways an imperfect criterion. These Lake-Dwellers were bronze-users, and apparently a different block of the Celtic or largely Celtic elements occupying Central Europe from the iron-using people, of Hallstatt culture, who dispossessed them. However, among the latter also finger-printed pottery appears in the material marking the spread of Hallstatt culture in south-west Germany and the Rhine valley, *e.g.* from the Degenfeld barrows in Württemberg,[2] from Eguisheim in Alsace,[3] from near Wiesbaden,[4] and near Mainz,[5] the last being actually Late Hallstatt in date. The truth is that this finger-printing is a Bronze Age survival from the Neolithic, which lived on in Central Europe to appear along with the wholly different true Hallstatt pottery.

So in Britain, while we may be practically certain of the arrival, about 800-700 B.C. or rather later,[6] of refugees from the Swiss Lakes who made finger-printed pottery, the determining factor in the evidence is not so much the pottery as the

1. Peake also, though his date, 900 B.C., seems somewhat too early.
2. Pieces in Brit. Mus.
3. *Cahiers d'Archéologie et d'Histoire d'Alsace*, 1927, p. 26 ff.
4. *A.U.H.V.* V, pp. 238-9.
5. *Mainzer Zeitschrift* VII, p. 48.
6. Crawford has himself more recently (1924) suggested that 800-700 B.C. may be a little too early: *Ant. Journ.* IV, no. 3, p. 224.

bronze implements. Finger-printed ware, originally Neolithic, may for our purposes be considered as Bronze Age, and must be so considered in the complex of immigration from the Swiss Lakes: but when in Britain the ware also appears—for we have seen that it does—along with features of Hallstatt culture, this, as reflecting the fusions that took place in the Early Iron Age abroad, can indicate further immigration, which may more properly be called not Bronze Age but Hallstatt.

All we can say is that some of the groups arriving in Britain in the immigration-period under review were Bronze Age people from the Swiss Lakes, who brought characteristic pottery and bronze implements. New complications arise as we attempt to trace other groups.

The Hallstatt culture duly appeared in the Rhine basin, where is also found the urn-field culture with its Lausitz traditions, which properly belongs to the Late Bronze Age. On the Lower Rhine, the important area for us, the two occur in close association: anyhow, the people may without impropriety be called Celtic, and they placed their cremated dead in barrows. But now an entirely new movement strikes in. Germanic peoples appear from the north-east, originally from South Sweden and Denmark. They were on the Upper Lippe by 800 B.C., and advancing west down the Lippe valley they had occupied the right bank of the Lower Rhine by 700. Typical of their pottery is the so-called Harpstedt style, and here again finger-printed ornament is regular and characteristic, on the rim and also on the neck of coarse unshapely urns.[1] It thus appears that finger-printing is far from being a wholly Alpine character in this period, and caution in this regard is accordingly necessary.

The Germans were crossing the Rhine by the 6th century; the Harpstedt tradition is characteristic of the 'Early Germanic' pottery of central and north-east Holland, where it lasted right on into the Roman period, and the peoples to which it belonged then turn out to be the Frisii and Batavi of Roman writers. The convincing evidence for this led its discoverer, Holwerda, to argue in 1907 [2] that it cannot have appeared very long before the Christian era; but much evidence from Germany was not

1. E. Rademacher, *R.V.*, *Niederrheinische Hügelgräber-Kultur*, and *Mannus*, Ergänzungsband IV, p. 112 ff.; Ergänzungsband VI, p. 176 ff.: Stampfuss, *Mannus* XVII, 4, p. 287 ff.; Ergänzungsband V, p. 50 ff., and *Das Germanische Hügelgräberfeld Diersfordt* (Augsburg, 1928): English summary by de Navarro, *Cambridge Ancient History*, VII, p. 66 ff.

2. Holwerda, *Nederland's Vroegste Beschaving*, pp. 104-6 of German summary: *cf.* p. 58 of Dutch, with plaat IV.

then forthcoming, whereas now we can appreciate the fact of its survival, and in due course trace the effect of its partial Romanization, with interest all the greater for the certainty of its arrival in at least the 6th century. Further south in Holland appears a mixed type of pottery called by Holwerda Gallo-German,[1] to which much the same scheme of chronology can apply, for indeed this heavy Germanic pressure on the Celts of the Lower Rhine, beginning about 600 B.C., produced a mixed Early Iron Age culture lasting into Roman times. All this Dutch and Lower Rhenish material is most important for our purpose, for Mr. Reginald Smith has rightly connected with it the British types of pottery occurring at Scarborough,[2] and while in Britain there is much to suggest the regular Hallstatt culture of the Rhine, rooted in south-west Germany and attesting Celtic peoples, yet the Germanic Harpstedt style is recognizable as well as the other,[3] and the two seem a great deal mingled. In fact, the British immigrant material closely reflects the situation set up by the overlap of Celt and German in the Low Countries, which naturally became a centre of dispersal.

Germanic pressure there effected the downfall of the Celts of the Lower Rhenish barrows, and while the mixed culture we have noted testifies to some partial absorption, quantities of Celts naturally fled.

To these the isolated settlement of Haulzy in Champagne may be attributed, and here the early graves are 7th century: if displacement had begun as early as this, Britain may also have been affected; but the 6th century is the date of the big migrations. Then undoubtedly groups scattered across the sea to Britain, and on the mainland not only the later graves at Haulzy attest the movement: a wholly new wave of people appears in south-west France and the Pyrenees, and beyond again in Spain; these are without doubt displaced Celts from the Lower Rhine, and they had reached Spain before 500 B.C.[4] There must have been certain vicissitudes, but there is nothing incredible in the speed of the movement across France.

1. *Ibid.* p. 97 ff., with taf. II-III.

2. *Arch.* 77, pp. 190-2.

3. The later series, both Hallstatt and Germanic, in Stampfuss' *Hügelgräberfeld Diersfordt*, quoted above, makes interesting comparison with some, *e.g.*, of the Park Brow and All Cannings Cross coarse-ware, notably nos. 6 onwards in the Harpstedt type-series of abb. 12 (p. 31), where also no. 8 recalls urns like that from Reading mentioned above, p. 147.

4. E. Rademacher in *R.V.* '*Kelten*,' § 6, '*Haulzy*,' and '*Hügelgräber der französischen Pyrenäengegend*': *cf.* Bosch-Gimpera, *Die Vorgeschichte der Iberer*, p. 93 ff. (map. p. 97), and Schulten, *Hispania*, p. 181. 600 seems rather too early, but a date before 500 is indisputable: see de Navarro, *op. cit.*, pp. 59-60 and 67-8.

The invaders of Spain we may leave there for the present, but the Pyrenæan barrow-culture thus set up demands attention, for it will be recalled that resemblance here to the contemporary British pottery which most concerns us was stressed by Mr. Bushe-Fox when he first found the latter at Hengistbury Head.

In Joulin's authoritative work on these Pyrenæan barrow-cemeteries,[1] the pottery falls into two main classes. One he calls 'indigène': it is coarse ware, often of bucket form, with finger-print ornament, and altogether to be dissociated from the Central European wares up to now considered, for it is simply the native Neolithic pottery of the district, that had lasted without interruption in the Bronze Age (which is there barely represented at all) till the time of the Celtic invaders. The latter were responsible for the other class, which is of the late Hallstatt types now definitely traced to the Lower Rhine along with the migration just recorded. In fact, as is only natural, the native Pyrenæan folk with their direct Neolithic tradition were reduced to subjection by the Celtic invaders.

Now it is a laboured explanation of the British material to bring the Celts from the Rhine to the Pyrenees, and then along with hastily subjected Pyrenæans up again to Britain: we have already seen reason, and shall see more, for their movement from the Rhine to Britain direct. And north-western France, the natural half-way house between the Pyrenees and Britain, remained untouched by Hallstatt racial penetration, for the Bronze culture of Brittany is essentially that of the western megalith-builders, reaching with them right back into the Neolithic Age, and it resisted the Hallstatt iron culture; there was what may be called Hallstatt influence,[2] yet Breton urns of Hallstatt profile, as from Kerhon and Bogoudonou,[3] contain hoards of the indigenous bronze axes which still and probably yet later characterized north-western France, and in the course of immemorial cross-channel trade found their way in numbers to Southern Britain.[4]

This latter intercourse, long-established as it was, deserves emphasis, for our Pyrenæan natives belonged to the same Western culture, with the Neolithic megalith-builders behind it, as was rooted in Brittany. Indeed, the Celts on the move

1. *Revue Archéologique*, 4me sér., XIX, 1912.
2. *E.g. Cte. Rdu. Ass. française pour l'avancement des Sciences*, Paris, 1900, p. 767: *B.S.P.F.* XXI, p. 241 ff.
3. Kendrick, *The Druids*, p. 42 and fig. 8.
4. Crawford in *L'Homme Préhistorique*, 1911, p. 289 ff.: distribution-map, fig. 79.

in the 6th century from the Rhine were split by the block of Western people in north-west France,[1] who divided those who reached Britain from those who reached the Pyrenees; on the other hand, any Pyrenæans who fled before the latter might well turn north, for all the western seaboard had a common native tradition, and as Southern Britain was linked with this, landings there by such folk are likely for just the reason which should rule out landings by Celtic pursuers.

We have already seen that in Britain, in spite of undoubted overlapping, there are arguments for distinguishing so-called Late Bronze Age from Early Iron Age pottery, *i.e.* the groups comprising the Deverel - Rimbury urns from the more properly Hallstatt wares with their Rhenish and Central European features. Concentrating for the moment on the former, we now observe the aptness of Abercromby's emphasis on its affinities with the western seaboard of France: the Deverel - Rimbury class strongly suggests the Pyrenees,[2] where the coarse finger-printed ware is, as stated, indigenous and not Celtic, and allied to it are the two groups of urns with handles and with semi-circular encrusted fillets (his Type 3, groups 1 and 2), mainly from Cornwall and Dorset, which he thought began to appear as early as 1400 B.C.[3] Even if this initial date be too early, the series comes at its lower end into our main migration-period with the true Deverel - Rimbury types, and as the handled urns derive from north-west France [4] there seems to have been more than trade in the cross-Channel intercourse we have spoken of. The notion of earlier infiltrations into south-west Britain with the handled urns is perfectly compatible with the arrival of Pyrenæan natives with Deverel - Rimbury urns, driven from their homes by the advancing Celts.

Indeed, the globular urns which belong both in Britain and the Pyrenees undoubtedly derive from Lausitz types of Central Europe, but influences from there were at work in France before the late Hallstatt movements of Celts. Not only the Pyrenæan globular urns and that from Foissac (Gard),[5] but pottery from Central France and up to the edge of Normandy shows Lausitz antecedents, while being emphatically Late Bronze Age, distinct from and earlier than the Hallstatt culture; in fact, a pre-

1. Cf. *Ant. Journ.* IV, no. 3, p. 226 (remark by Dr. Wheeler).
2. *Bronze Age Pottery* II, p. 49.
3. *Ibid.*, pp. 107, 109.
4. *Ibid.*, p. 48.
5. Dechelette, *Manuel* II, p. 378, fig. 148, no. 2.

Hallstatt movement into France has been suggested from the South German urn-fields,[1] and this too may be reflected in Britain. Certainly similar Lausitz antecedents are clear at All Cannings Cross,[2] and Late Bronze Age pottery also of this character has been quoted from Champagne,[3] and attributed to such a movement from Germany.[4]

But in addition to the finger-printed and other such pottery which, as its Continental analogies show, must largely be classed as Bronze Age in type, the striking feature of sites like All Cannings Cross and Hengistbury is the presence of finer ware which in profile and quality is Hallstatt. And in the same district of Champagne the recent work of the Abbé Favret has revealed a late Hallstatt culture where the pottery is identical with this latter class. It is that of Les Jogasses, near Chouilly,[5] and it belongs to the very end of the Hallstatt period, not much earlier than 500 B.C. The absolute identity of the pottery with All Cannings Cross types must surely mean direct and presumably rapid movement of people from the one region to the other, and we must therefore make clear the situation in Champagne at this crucial date.

The big move of cremating people from the Lower Rhine towards the Pyrenees has already taken place, and Haulzy shows that some of them stopped in Champagne. Behind them, while some Germans were mingling with the Celtic remnant in the Netherlands, the main German advance was driving more Celts southward up the Rhine as far as the highlands of Eifel, Hunsrück and Taunus, where the crop of hill-forts recorded in a previous section marks the frontier on which they rested.

From the Rhine south of this there was further movement westwards into Champagne, the result of which was fusion with such Lower Rhenish refugees as those at Haulzy, and other elements present in the neighbourhood from which arose the great Celtic culture of the Marne. Thus before the middle of the 5th century an area of culture was formed stretching from

1. Poisson on the pottery from Fort Harrouard (Eure-et-Loir), *B.S.P.F.* XXV, pp. 372, 376, comparing that from Dompierre (Allier) and Pougues-les-Eaux (Nièvre). The 'Bronze Age' finger-printed pottery from Chastel-sur-Murat (Cantal) should be contemporary, and the style there survived through the Iron Age: *B.S.P.F.* V, pp. 485-7, VI, p. 79: *cf.* exx. from Neussargues, V, p. 493. In Normandy, the Seine seems to mark the eastward limit of true Hallstatt penetration: *Revue Anthropologique* XXXII, p. 298 ff.

2. See p. 143 above.

3. At Barbonne near Epernay and Vert-la-Gravelle near Châlons: Hubert, *Revue Préhistorique*, 1910, pp. 97-115.

4. *All Cannings Cross*, pp. 38-9.

5. *Revue Archéologique*, 5e. sér. XXV, p. 326 ff.: XXVI, p. 80 ff., where note especially figs. 19-22.

Champagne to the middle Rhine valley, in which the Hallstatt tradition, joining with trade-borne Greek influence from the south, produced the civilization and art called La Tène,[1] the great achievement of the Celts which went on developing till met by the advance of Rome four centuries later.

The *grosse Expansivkraft* of the Celts ultimately carried it far and wide over Europe in all directions save where the Germans blocked the way to the north and north-east, but our concern is with its earliest focus. Here, along with the new development in art, its most important feature is the adoption of the rite of inhuming the dead, typical of the Marne culture from the very beginning of the La Tène period.

Now whereas at Haulzy in the 6th century the rite is cremation as on the Lower Rhine, at Les Jogasses and similar sites inhumation has already begun, but the art and craftsmanship of La Tène has not yet appeared. Les Jogasses thus stands at the very end of the Hallstatt period: though inhumation had come in, it is distinct from the earliest La Tène culture of the Marne.

Favret says:[2] "La transition est brusque: ce sont deux époques nettement différentes; on ne tourne qu'une page, mais on change de chapitre." The new chapter had opened before 450 B.C., but its features were not brought to Britain by immigration, for the movement ceased at the turning of the page. In the earlier years of the 5th century, therefore, our long and tangled tale reaches its end.

Its last phase is the arrival from Northern France of people who inhumed their dead, and produced the distinctive better-class pottery on sites like All Cannings Cross. The presence of inhuming immigrants in the eastern counties at this time has already been noted, but the association in Wessex of this pottery with inhumation is, in spite of its novelty, a presumption which must be entertained. Till cemeteries of this culture have been discovered in Britain, nothing further can be said, but an overlap of inhumation and cremation may be expected, for as has now been abundantly shown, the culture represents an overlap of a number of different groups, of which, for example, the people of the Deverel-Rimbury urns must be one, perhaps a composite one, and those of the All Cannings Cross-Les Jogasses pottery another.

1. The name comes from the type-site of La Tène on the Lake of Neuchâtel though it is now realized that the earliest phase of the culture is here absent.

2. *Op. cit.* XXV, pp. 332-3.

For while save for possible infiltration into the remoter south-west we have seen immigration before the 7th century to be not proven, from that date till the early 5th Britain was penetrated by people from the Western Alps, from the Rhine and the Netherlands, from the Pyrenees very possibly, and perhaps from elsewhere in France before the final arrivals from Champagne. Various Celtic stocks clearly predominate, but native Alpine, Germanic, and Western elements are also apparent. While many groups cremate, the latest certainly inhume. The earlier majority are bronze-users, but all the time the knowledge and use of iron is coming in, as is shown by early iron imitations of bronze socketed spearheads and axes,[1] the remarkable sickle from Llyn Fawr,[2] the iron spearhead in the Colchester bucket-urn,[3] and the late Hallstatt sword from the Thames.[4] The immigrants reach far up the East Coast, and spread over all the south-east of the island, stopping short at the Midland forests, the western slopes of the Cotswolds, and the Somerset plain, and congregating most thickly on the chalk uplands, which could be most readily cultivated without forest-clearance.[5] They were scattered settlers, without the military force we associate with conquest: at St. Catharine's Hill at least no fortifications arise for some time.[6]

It has been emphasized here in the section on the bronze bird-figure that products of Mediterranean craftsmanship were imported before the La Tène period, and as the latter began, in north-eastern France at least, immediately after the last of them arrived, the continuance of cross-Channel trade is only to be expected. The best evidence of this is that of La Tène I brooches, which after early imports were imitated in Britain itself, and both importation and imitation (not without development) were prevalent enough for these brooches to become, broadly speaking, typical of the people. These brooches have been brilliantly discussed by Dr. Fox,[7] and his distribution-map to a great extent shows that their importation was across the Channel, and is contrasted with the distribution of the beakers of the Early Bronze Age, which came by immigration from the

1. *B.M. Early Iron Age Guide*, p. 87.
2. *Arch.* LXXI, p. 133 ff.
3. See p. 146 above.
4. *B.M. Early Iron Age Guide*, pp. 88-9.
5. See Collingwood in *Antiquity*, vol. III, no. 11, p. 261 ff.
6. Dr. Clay's opposite contention in *W.A.M.* XLIII, p. 322, has perhaps a local rather than a general application.
7. *Arch. Cambr.*, June 1927, p. 67 ff.

Rhine. That the brooches came largely by trade and not by immigration, which was over just as their type begins, is thus clearly shown, for as we have seen many of the immigrants came from the Rhine by just the route which the beaker-people had taken.

But these brooches do not belong wholly to the area of the mixed population we have been tracing. Later in the La Tène period Britain received two fresh and entirely distinct waves of immigrants. One, quite late in La Tène I, arrived in Cornwall from Northern Spain, being in fact descendants of the Celtic invaders there whom we have already noted[1]: these spread over the south-west, occupying the outlying settlements of our earlier comers, such as Ham Hill, but stopping at the Wessex chalk plateau which they held, and reached Gloucestershire and beyond, while some seem to have crossed the Severn Sea. These people also used La Tène I brooches for some time, but their pottery and superior artistic talent marks them off from our people, though as the latter in La Tène II developed a more distinctively La Tène technique in decorating such products as pottery, some degree of uniformity in culture is perceptible between the two groups, who were after all largely akin: the well-known iron currency-bars, for instance, seem to have become common to both.

The other are the well-known people of the Yorkshire barrows and chariot-burials, who are clearly rooted in the Marne culture, and if they are Ptolemy's Parisii and derive from those of the Paris basin, the slight difference of their culture from that of Champagne is easily explicable.[2] Their migration can probably be dated about the end of the Continental La Tène I (*c.* 250 B.C.)—hence the single La Tène I brooch found brought by them to Cowlam. A few of them seem to have gained a footing in the eastern counties,[3] but that the main body could not settle south of Yorkshire is as important as that the south-western invaders could not scale the chalk scarp of Wessex.

Both facts show what we have already appreciated on internal evidence; namely, that our Late Bronze Age and Hallstatt immigrants, scattered bands as they were to begin with, consolidated all over the south and south-east of Britain suffi-

1. Leeds, *Arch.* 76, p. 205 ff.

2. It is worth noting that the chariot-burial at Nanterre near Paris is more like the Yorks examples than those of Champagne, in that horses were buried: Déchelette, *Manuel* IV, p. 531.

3. Fox, *Arch. Cambr. Reg.*, pp. 81, 86, burial at Newnham.

ciently to keep these later comers away. The culture of their area, as the pottery shows, was continuous and uninterrupted from their arrival till the end of the 2nd century B.C., and thus the contention of Peake [1] and earlier scholars that there was anything like a general invasion about 300 turns out to be wholly unfounded.

The mixed Celto-German population round the Lower Rhine do not appear again till their descendants, the Belgae, come over in La Tène III, and Flanders before their arrival there seems scarcely to have been populated at all,[2] while save for four pieces of Marne pottery,[3] which must be trade imports, like the contemporary foreign brooches, etc., the culture of Northern France is unreflected till La Tène III where our people were established. Their products as their original Bronze Age and Hallstatt culture faded may be called La Tène I and La Tène II in date, but there was no new blood from Continental people of La Tène I and II culture.

The evidence here brought forward has been mainly that of pottery, because it is by far the most reliable, in dealing with barbarian cultures, for the movements of bodies of people, but the evidence of other material, and in particular the distribution of Late Bronze Age weapons and hoards, which is notably wider than that of any corresponding pottery, requires careful handling: in fact, a very great deal more work must be done to settle the distribution of the peoples with whom we have been concerned, and that of the various groups of which they were composed, the St. Catharine's Hill people among the others.

In conclusion, it may be emphasized that distinctions of material culture need not always coincide with differences of language. We have said something of the theories concerning Goidels and Brythons, or Q-speaking and P-speaking Celts: the controversy there involved is an intricate one, but there is one point that may here be suggested. It is generally accepted that the bulk of the Britons were when they came under Roman rule a Brythonic or P-speaking people. The Belgic invaders of La Tène III, who though of partly German blood must have been Brythonic in speech, had neither distribution, numbers, nor time before the Roman conquest to change the speech of

1. His invasion 3 on p. 142 above.
2. de Navarro, *op. cit.*, p. 68.
3. Two from Deal, one from Oxford (*P.S.A.* XXVI, pp. 129-133), and one from near Cambridge (Fox, *op. cit.*, p. 83).

the people they found in possession. These people were the descendants of those we have been considering. It is surely permissible to urge that though some of the earlier arrivals, notably the Western Alpines, may well, as Crawford and Peake have suggested, have been Goidelic, the great mass of the immigrants were no less prevailingly Brythonic in speech at the time of their arrival than they were five centuries or more later. Anyhow, they may be provisionally considered as the first Celts to reach our shores, and the Celtic peopling of Britain is none the less momentous if we remember [1] how large must have been the survival in blood of the primitive stock of the Stone Age inhabitants.

Greater precision than this is not yet possible in the attempt to define the origins of the early inhabitants of St. Catharine's Hill.

The following distribution-list, arranged alphabetically by counties, gives the sites marked on the accompanying map (fig. 18) where either on fortified or unfortified habitation-sites or in isolation domestic pottery has been discovered belonging to one group or another of the immigrant culture discussed in this essay. It should be compared with the distribution map of Deverel-Rimbury sepulchral pottery by Dr. Clay and of La Tène I brooches by Dr. Fox noticed above (pp. 141 and 158), and also with the Ordnance Survey map of Roman Britain, for the descendants of these people lived on through the Belgic invasions to become the subjects of Rome. The mingling in distribution of this pottery and other contemporary material in the same area is exemplified by the map of the St. Catharine's Hill area given in the Introduction (fig. 3).

No attempt at regional or chronological sub-division has been made, and all sites from the Late Bronze Age to the La Tène II period have been included, as belonging to the same complex of groups either in an earlier or later phase.

The time for elaborating sub-divisions has not yet arrived: meanwhile this list and map may assist the appreciation of the culture in question as a whole. It is impossible to ensure completeness, but the number of sites which have come to the writers' notice is large enough to make the geography of the culture reasonably clear in outline.

1. See Pokorny, *R.V.* '*Britische Urbevolkerung*,' § 2.

FIG. 18.

Distribution-Map of the Early Iron Age Culture represented on St. Catharine's Hill, as shewn by domestic pottery.

DISTRIBUTION LIST OF DOMESTIC POTTERY

Acknowledgments for help in compiling this list are due to Mr. G. C. Dunning, Mr. Stuart Piggott, and Mr. C. A. Raleigh Radford, F.S.A., as indicated in each case by their initials.

BERKSHIRE.

Blewburton Hill, nr. Blewbury. Sherds in rabbit-scrape. S.P.
Compton Beauchamp. Rubbish-pits. *Earthworks Committee's Report*, 1927, p. 23.
Hinksey Hill. Small settlement. Attested by the present writers.
Knighton Hill, nr. Uffington. Rubbish-pits, with Hallstatt - La Tène I pottery. *Ant. Journ.* VII, no. 4, p. 517.
Lowbury Hill. Small settlement. Atkinson, *Lowbury Hill*, p. 68 and pl. XVIII, group A.
Southern Hill, nr. Reading. Pot in Brit. Mus., suggesting Harpstedt type: see p. 153 above. *Ant. Journ.* IV, no. 2, pl. XXVI, 2.
Theale. Small settlement. Reading Mus. G.C.D., C.A.R.R.
Tubney. Pot in Brit. Mus.
Wytham. Sherds in Ashmolean. C.A.R.R.

BUCKINGHAMSHIRE.

Ellesborough. Pit-dwellings. *Records of Bucks*, 1908, p. 349 and fig. II.
Win Hill, Hitcham. Pit-dwellings. Abercromby, *Bronze Age Pottery* II, p. 122 (no. 474).

CAMBRIDGESHIRE.

Abington Pigotts. Settlement. *P.P.S.E.A.* IV, no. 19, p. 211 ff, with pl. I and fig. 2 A.
Grantchester. Settlement. Fox, *Arch. Cambr. Reg.*, p. 112, and pl. XI, A. 2-4.
Hauxton Mill. Settlement. *Ibid.*, A. 5-6, and pl. XVI, 9.
Swaffham. Small settlement. *Ibid.*, pp. 47-8.
Trumpington. Settlement. *Ibid.*, p. 111, pl. XIV, A. 7, and XVI, I.
War Ditches, Cherry Hinton. Pottery (fortifications undated). *Ibid.*, p. 96 and pl. XVI, 6.
Fox, *ibid.*, pl. XIV, XVI, gives other exx., broadly speaking of this character, but perhaps of La Tène III date.

DORSETSHIRE.

Hambledon Hill. Hill-fort. *Wessex from the Air*, p. 44 ff. *Cf.* p. 76 above.
Handley Hill. Square enclosure (also "Angle Ditch"). Pitt-Rivers, *Excavations*, IV, p. 46 ff.
Various coarse sherds from the Durden Collection without locality are stored in Brit. Mus., which may be attributed to Dorset, but the paucity of domestic pottery forms at present an odd contrast to the abundance of Deverel - Rimbury urns in the county.

ESSEX.

Braintree. Pits with Hallstatt pottery. Colchester Mus. G.C.D.
Chesterford. Large pot. Fox, *Arch. Cambr. Reg.*, pl. XIV, C. 2.
Grays. Pot from the Thames. Colchester Mus.
Maldon, near. Pot from a creek. *Ibid.*
Shoebury. Pits: Hallstatt as well as later pottery. Colchester Mus. G.C.D.
Skitts Hill, nr. Braintree. Pile-dwelling. *Essex Naturalist*, XI, pp. 113-14; XIV, p. 142 ff. and pl. XXVII A.
Southchurch. Small pot. Colchester Mus.
Walthamstow. Settlement, also with later occupation. Pottery in Brit. Mus.

GLOUCESTERSHIRE.

LECKHAMPTON. Some early sherds (with more later La Tène and Roman). Fortifications not precisely dated. *Trans. Bristol and Glos. Arch. Soc.*, XLVII, p. 81 ff: cf. *Arch.* 76, p. 236.

HAMPSHIRE.

(Sites marked * occur in fig. 3 above and note, p. 5.)

ARMSLEY, nr. Breamore. Settlement, increasing in Roman period. *H.F.C.* X, pt. 1, pp. 56-8.

BASINGSTOKE. Pottery, with 'pie-crust' finger-printed rims, and applied bands. Reading Mus. G.C.D.

*CHEESEFOOT HEAD, 1 mile S. of. Pottery.

*COLDEN COMMON. Pit-dwellings.

*CORHAMPTON DOWN. Village, increasing later and in Roman period. *H.F.C.* VI, pp. 253-5; *Hants Chronicle*, Apr. 18, 1908, p. 9.

FORDINGBRIDGE. Pottery. *All Cannings Cross*, p. 40.

HENGISTBURY HEAD. Settlement. Bushe-Fox. *Hengistbury Head Report*, p. 30 ff.

HURSTBOURNE. Pottery, with more later La Tène. C.A.R.R.

MARTIN DOWN. Square enclosure. Pitt-Rivers, *Excavations* IV, p. 185 ff.

*OLIVER'S BATTERY, Abbotstone Down. Sherds in rabbit-scrape.

POKESDOWN. Sherds found in area of Deverel-Rimbury urn-field: *Ant. Journ.* VII, no. 4, pp. 481-2: cf. *W.A.M.* XLIII, p. 320. (Druitt Colln.)

REDENHAM, nr. Weyhill. Pit-dwellings. *H.F.C.* IX, pp. 2, p. 217 ff.

*ROUNDWOOD, nr. Micheldever. Pottery in ditch of disc-barrow. *Ibid.*, pp. 191, 198-209.

*ST. CATHARINE'S HILL. Hill-fort.

SANDOWN, Isle of Wight, nr. Three sherds (with two later La Tène) on Neolithic site. *H.F.C.* X, pt. 1, pp. 32-3.

*STANMORE (Battery Hill), Winchester. Settlement, with oven (Hallstatt period). *Ibid.*, p. 63 ff.

*TELEGRAPH HILL, nr. Chilcombe. Pottery.

*WORTHY DOWN. Village. *Ant. Journ.* I, no. 4, p. 321 ff.: *H.F.C.* X, pt. 2, p. 178 ff.

HERTFORDSHIRE.

ARBURY BANKS, Ashwell. Coarse pottery from settlement, perhaps mostly later La Tène, as also fortifications. Fox, *Arch. Cambr. Reg.*, pl. XIV, C. 1: *cf.* pp. 135-6.

TURNFORD. Pottery. G.C.D.

HUNTINGDONSHIRE.

FLETTON. Settlement. *V.C.H. Hunts* I, p. 209 ff.

SOMERSHAM. Settlement. *Ibid.*

WOODSTONE. Settlement. *Ibid.*

KENT.

BROADSTAIRS. Village, chiefly La Tène III, but some pieces earlier, including vessel of Lausitz character. *P.S.A.* XXII, p. 509: XXV, pp. 89-0; *Arch.* 52, pl. XII, figs. 1, 3: 61, pt. 2, p. 427 ff., esp. pp. 427, 434-5.

CHATTENDEN and FRINDSBURY, between. Two large pots in Brit. Mus.

LOWER HALSTOW. Settlement, at least La Tène II as well as III. *P.P.S.E.A.* V, no. 27.

MARGATE. Settlement. Pottery in Brit. Mus.

WORTH. Pottery from settlement below later Romano-Celtic Temple. *Ant. Journ.* VIII, no. 1, p. 81 ff.

WYE. Pottery. Private information.

LEICESTERSHIRE.

LOUGHBOROUGH. Pottery, including carinated types. C.A.R.R.

LINCOLNSHIRE.

INGOLDMELLS, nr. Pottery, with later La Tène and Roman. Private information.

MIDDLESEX.

OLD ENGLAND, Brentford. Pottery presumably from settlement. *Antiquity*, vol. III, no. 9, p. 20 ff.

THAMES at HAMMERSMITH, MORTLAKE, WANDSWORTH, and elsewhere. Pots in Brit. Mus. and London Mus.

NORFOLK.

GRIME'S GRAVES, "black hole" site. Settlement. *Grime's Graves Report*, 1914, pp. 212-3, figs. 82-3: *P.P.S.E.A.* II, p. 433, fig. 89: III, pp. 93-4: IV, pt. 2, p. 192: V, pp. 107-8, 119.

NORTHAMPTONSHIRE.

FENGATE, Peterborough. Settlement. Pottery in Northampton Mus. and Coll., Wyman Abbott (G.C.D.); cf. *All Cannings Cross*, p. 39.

HUNSBURY, nr. Northampton. Settlement, lasting to later La Tène; fortifications undated. Pottery in Northampton Mus. *Assoc. Architectural Society's Reports* (*Northants*) XVIII, p. 53 ff., pl. V; *Journ. Northants Nat. Hist. Soc.* XVIII, p. 230: XIX, pp. 1 and 29 ff., esp. p. 37 and pl. XV; *V.C.H. Northants* I, p. 147.

OXFORDSHIRE.

BAMPTON, Calais Farm. Pits, with pottery, including carinated bowl in Ashmolean (Manning Colln.). *Arch.* 71, p. 234: *The Antiquary*, 23, p. 155: *Berks, Bucks, and Oxon Arch. Journ.* IV, p. 11.

CHASTLETON. Hill-fort of early date. In course of excavation by Mr. E. T. Leeds.

STANDLAKE. Pits: pottery in Ashmolean. *Arch.* 71, p. 256: *P.S.A.*, 1st ser. IV, pp. 70, 92-100.
Pottery also occurs which is perhaps later La Tène, and attributable to the Celts of the S.W. British area (*cf.* finds at Yarnton, *Arch.* 71, p. 262), some of whom reached as far as the Cherwell, and seem to be Ptolemy's Dobuni, between whom and the Catuvellauni of the later S.E. group that river is the apparent boundary (*Arch.* 71, p. 229).

SOMERSETSHIRE.

HAM HILL. Occupation preceding that of the later La Tène people of the S.W. Celtic area, responsible for the hill-fort in its final form. Early pottery in Taunton Mus. G.C.D.: *Somerset Arch. and Nat. Hist. Soc. Proc.* LXVII, p. lxxiv; LXX, pp. 112, 116.

KEINTON QUARRY, nr. Somerton. Pottery in Glastonbury Mus. G.C.D.

SUFFOLK.

CAVENHAM HEATH. Hearth, with Hallstatt pottery and flint flakes. Specimens in Brit. Mus.

LAKENHEATH. Pottery. Fox, *Arch. Cambr. Reg.*, p. 82; pl. XI, A. 1: XIV, C. 3: XVI, 3.

SAXMUNDHAM, nr. Pottery, like that from Grime's Graves, in Brit. Mus.

SURREY.

COBHAM. Pit-dwellings, with early as well as later pottery. *Surrey Arch. Coll.* XXI, p. 202, pl. I, 2-5.

KINGSTON HILL. Pottery in Brit. Mus. and at Soc. Antiquaries: Late Bronze Age urns *ibid. P.S.A.* 1st ser., I, p. 67 (and Clay's list, *W.A.M.* XLIII, p. 323).

WADDON, nr. Croydon. Site continuously occupied till Roman period: "Class A" pottery should be La Tène I-II. *P.P.S.E.A.* V, pt I, no. 10, pp. 80-2: *Surrey Arch. Coll.* XXXVII, pt. i, p. 59 ff.

WALTON-ON-THAMES, high ground above. Bowl, incised after firing, in Brit. Mus.

WEYBRIDGE (Oatlands). Biconical pots, in Weybridge Mus. *Ant. Journ.* V, no. 1, pp. 74-6.

WISLEY. Pit-dwellings and kilns. *Ant. Journ.* IV, no. 1, p. 40 ff.

SUSSEX.

CABURN. Hill-fort, enlarged in La Tène III. *Arch.* 46, pt. 2, p. 452 ff., esp. pl. 25, figs. 33, 43, 49, 51; *Suss. Arch. Coll.* LXVIII, p. 1 ff.

CISSBURY. Hill-fort perhaps later La Tène, but some pottery shews earlier occupation. *Arch.* 42, p. 53 ff.: *J.R.A.I.* V, p. 357 ff., esp. pl. XVIII, 7-8: *Suss. Arch. Coll.* LXVII, p. 55 ff.

EASTBOURNE. Settlement, with Hallstatt pottery. *Ant. Journ.* II, no. 4, p. 354 ff.

FINDON PARK. Settlement. *Ant. Journ.* VIII, no. 4, p. 449 ff.

HOLLINGBURY, nr. Brighton. Pottery from pit: hill-fort likely to be contemporary. *Brighton and Hove Archæologist* I, p. 18 ff.

KINGSTON BUCI. Settlement (pits) with later occupation lasting to Roman period (to be published shortly). Information from Dr. Eliot Curwen, F.S.A.

LANCING. Perforated bowl of Hallstatt type, in Brit. Mus.

PARK BROW, nr. Cissbury. Successive settlements. *Ant. Journ.* IV, no. 4, p. 347 ff.: *Arch.* 76, p. 1 ff.

PULBOROUGH. Urn suggesting Göritz class of Lausitz type. *P.S.A.* XXIII, pp. 376, 385.

THE TRUNDLE (St. Roche's Hill, Goodwood). Hill-fort. *Suss. Arch. Coll.* LXX, p. 33 ff.

WILTSHIRE.

ALL CANNINGS CROSS. Village. *Ant. Journ.* II, no. 1, p. 13 ff.: Cunnington, *All Cannings Cross* (1923). Also *W.A.M.* XXXVII. p. 526 ff.

BOWERCHALKE. Haematite-coated sherd in Blackmore Mus., Salisbury. *W.A.M.* XLIII, p. 321.

CASTERLEY CAMP. Early pits prior to La Tène III fort. *W.A.M.* XXXVIII, pp. 53-105: XL, p. 32, and pl. 8, fig. 1.

COLD KITCHEN HILL, Brixton Deverell. Settlement, continuing through later La Tène. *W.A.M.* XXVII, p. 279 ff.

FIFIELD BAVANT. Village (La Tène I-II). *W.A.M.* XLII, p. 457 ff.

FIGSBURY RINGS. Hill-fort. *All Cannings Cross*, p. 183: *Wessex from the Air*, pp. 84-6: *W.A.M.* XLIII, p. 48 ff.

FISHERTON. Pits. Pottery in Salisbury Mus. *All Cannings Cross*, p. 39.

GUY'S RIFT, Slaughterford. Some early La Tène occupation. *Proc. Spelaeological Soc. (Bristol Univ.)*, 1925, p. 229 ff.: *W.A.M.* XLIII, p. 483 ff.

HIGHFIELD. Pottery (Hallstatt - early La Tène) in Salisbury Mus. G.C.D. *Hengistbury Head Report*, p. 33.

LIDBURY CAMP. Hill-fort. *W.A.M.* XL, p. 12 ff.

LIDDINGTON CASTLE. Hill-fort. *W.A.M.* XXXVIII, p. 576 ff.

Oldbury Camp, Cherhill. Pottery from settlement preceding later La Tène hill-fort. *All Cannings Cross*, p. 39: *Devizes Mus. Catalogue*, p. 96, no. 847: *W.A.M.* XXVIII, p. 277 ff.

Oliver's Camp, nr. Devizes. Hearths with pottery prior to later La Tène hill-fort. *All Cannings Cross*, p. 39: *W.A.M.* XXXV, p. 408 ff., esp. p. 420.

Potterne. Haematite-coated bowl, All Cannings Cross type. Devizes Mus. G.C.D.

South Lodge Camp, Rushmore Park. Square enclosure. Pitt-Rivers, *Excavations* IV, p. 1 ff.

Swallowcliffe Down. Village (mainly La Tène I). *W.A.M.* XLIII, p. 59 ff. and 540 ff.

Wedhampton. Haematite-coated bowl, All Cannings Cross type. Devizes Mus. G.C.D.

Wilsford Down (N. Wilts). Pits: pottery in Devizes Mus. (*Catalogue*, pp. 92-4). *W.A.M.* XXXVII, p. 536.

Winkelbury Camp. Settlement preceding later La Tène hill-fort (*cf.* p. 78 above). Pitt-Rivers, *Excavations* II, p. 233 ff.

Winterbourne Monkton Down. Pottery. *W.A.M.* XXXVIII, p. 108.

"Wuduburh," Knighton Hill. Square enclosures. *Wessex from the Air*, pp. 131-7.

YORKSHIRE.

Atwick, E. Riding. Early La Tène settlement. G.C.D. *Man*, 1910, 48.

Scarborough (Castle Hill). Pits: Hallstatt-period settlement. *Arch.* 77, p. 179 ff.

West Furze, Ulrome, E. Riding. Pit-dwelling site: platform above Neolithic level with Early Iron Age pottery, Late Bronze Age spear-head, etc., and some later La Tène and Roman occupation. *Arch.* 62, pt. 2, p. 591 ff.

POTTERY WITH LATE BRONZE HOARDS

DURHAM.

Heathery Burn (Cave-dwelling). Of the pottery with this famous hoard (*Arch.* 54, pt. 1, p. 87 ff.) fragments exist in Brit. Mus. of a small shouldered pot, a rim with internal bevel, two flat-topped slightly everted rims, one with slightly projecting carinated shoulder below, one perforated after firing, and two little pieces of base, all of hard brown to grey gritty ware with coarse finish.

ESSEX.

Dovercourt. With hoard of 15 socketed axes (*Colchester Mus. Report*, 1912, p. 8 and pl. I B) was found a coarse sherd of Hallstatt character, and a few months later in immediate proximity a small 3-lugged globular urn of Deverel - Rimbury type. (Information from Mr. E. J. Rudsdale).

KENT.

Birchington. Bowl of Hallstatt character containing hoard of palstaves. *Ant. Journ.* IV, no. 3, p. 220 ff.

SUSSEX.

Worthing. Pot, more probably La Tène I than Hallstatt, containing palstaves and socketed axes.
Ibid., 81 in Evans' List II; nos. 88 (Sittingbourne), 93 (Marden), and 108 (Wilmington) were also in pots, but of undiscoverable character.

SEPULCHRAL POTTERY

In addition to the urns treated by Dr. Clay, the following sepulchral pottery (not on the map) may be noticed, as having features of Early Iron Age date:—

HAMPSHIRE.

*Preshaw. Finger-printed bucket-urn of Hallstatt quality from barrow. In Brit. Mus. *Ant. Journ.* VIII, no. 1, pp. 98-9.

OXFORDSHIRE.

Rollright, nr. Small urn of Hallstatt - La Tène I character from barrow. In Brit. Mus.

SURREY.

Shamley Green, nr. Wonersh. Urn with cremation in stone cist: flat-topped rim, high sharp shoulder with lugs. *P.S.A.* XVIII, p. 251.

SUSSEX.

Park Brow. Small urn (Early Iron Age character) with cremated bones in rough cist. *Ant. Journ.* IV, no. 4, p. 355, fig. 14.

WILTSHIRE.

Morgan's Hill. Finger-printed bucket-urn of Hallstatt quality in Brit. Mus. *Ant. Journ.* VIII, no. 1, pp. 98-9.

Cf. the cremations in barrow at Weeting Park (Norfolk) and Triplow Heath (Cambridge) with Early Iron Age pottery mentioned by Fox, *Arch. Cambr. Reg.*, pp. 79-80, and contrast the inhumations, *ibid.*, pp. 76 9 at Barrow Bottom and Brandon (Suffolk), Royston (Herts), and near Triplow (Cambridge), as well as *e.g.* that at Worthy Down mentioned below, p. 181.

ST. CATHARINE'S HILL AND THE ORIGIN OF WINCHESTER

THE latest group of pottery from the settlement on the Hill has been seen to be of the La Tène II period. Its bulk is not great compared with the amount of Hallstatt-La Tène I pottery, and comparison with other sites, including the neighbouring one of Worthy Down, has shewn that the more developed types of decoration and form, which may be ascribed to the latter part of the La Tène II period, are here wholly absent. The chronology of Middle La Tène times in Britain is as yet imperfectly established, but there is no reason to suppose that the French dating for La Tène II, *viz.* 300-100 B.C., is so much too high for this country that the last group of the St. Catharine's Hill pottery may be placed much after the middle of the 2nd century B.C., and it may well be earlier.

The evidence obtained thus suggests about 150 B.C. as the safest approximate date for the destruction of the settlement, and that this is more likely to be too late than too early.

This conclusion could only be upset by one of the two following arguments. Firstly, the group of La Tène II pottery which has been in question may really be late and not early in that period, if it be denied that the typology suggested by other sites is valid for this one. The close proximity of Worthy Down, where later material occurs as well as certain close parallels to the St. Catharine's Hill group, is against this contention, as the two sites are not five miles apart, and thus the former must surely have ceased to be occupied before the latter. Secondly, pottery or other material of later types may exist undiscovered on the Hill. The number of undetected pits on the site may be quite large, and only the exhaustive trenching of the entire area could decide the point.

In default of that, this contention can never finally be refuted, but it must remain no more than a guess; the relative chronology laid down for the Entrance works is against it, as far as the evidence goes, and so is the absence of the suggested later types of pottery from among the large quantity of surface finds all over the occupied area. Thus though the bare possibility should perhaps be conceded, there can be no justification, as matters stand, for bringing down the possible date of the destruction any nearer the 1st century B.C.

Here for the moment the matter may be allowed to stand, while the features of the ensuing La Tène III period in this region are considered. Its beginning is marked not merely by an artificial dividing-line created by modern archæologists: the evidence for an entirely new immigration from across the Channel is clear enough. The new-comers, who appeared about the middle of the 1st century B.C., are characterized by brooches of the regular La Tène III type, in which a triangular catchplate, usually pierced, replaces the bent-back and attached foot of La Tène II, and by the general use of the potter's wheel for their distinctive bead-rimmed pottery. In many places, as at Casterley,[1] Oliver's Camp near Devizes,[2] and Winkelbury,[3] they made a new and larger fortified settlement on a site where there had been previous occupation by people of the All Cannings Cross culture, or as at Worthy Down, an unfortified one[4]: in many, again, they occupied an entirely fresh site, as at the villages at Woodcuts Common and Rotherley on Cranborne Chase,[5] and at the large *oppidum* of Silchester.[6] Their type of pottery is the I - J class of Hengistbury Head,[7] and the parallels with such well-known Continental sites as Haltern and Mont Beuvray, and occasionally the presence of Arretine pottery imported from Italy, conclusively fix its date in the century before the Roman conquest of Britain.

Further, there is abundant evidence that it was these people who without any racial change were incorporated at that conquest as subjects of the Empire. Now we know from the geographer Ptolemy that in the first half of the 2nd century A.D. the north of Hampshire was included in the territory of the Atrebates, and the south in that of the Belgæ, and it is a fact now well known to all students of Roman Britain that the Romans took over the tribes they found in this as in other provinces and made them the units of their system of local government. As such units, the Atrebates had Silchester (Calleva Atrebatum) as their chief town or cantonal capital, and the Belgæ had Winchester (Venta Belgarum). The former of these two towns was, as we have seen, an *oppidum* of pre-

1. Cunnington in *W.A.M.* XXXVIII, p. 53 ff., esp. pp. 74-86.
2. Cunnington, *ibid.*, XXXV, p. 408 ff.
3. Pitt-Rivers, *Excavations* II, p. 233 ff.: see p. 78 above.
4. *H.F.C.* X, pt. 2, p. 178 ff.
5. Various exx. in Pitt-Rivers, *Excavations*, Vols. I and II.
6. The examples in May, *Silchester Pottery*, plates LXXV—LXXVIII, may be safely held to be pre-Roman.
7. Bushe-Fox, *Hengistbury Head Report*, plates XXII—XXIV.

Conquest date, as is shewn not only by finds of pre-Conquest pottery, but also by the existence of coins, inscribed CALLEV and clearly minted at Calleva,[1] of Eppillus, a prince more or less contemporary with Augustus who was the son of that Commius who figures in Cæsar's *Commentaries* and seems to have founded a dynasty in S. Britain after the conquest of Gaul. The rule of these princes, as is known from the distribution of their coins, covered at least a good part of the area in which have been found the settlements characterized by the La Tène III pottery and brooches we have been considering, with which indeed their coinage is often associated, and the clearly Gaulish provenance of the archæological material agrees with the evidence of the tribal names in identifying this culture with La Tène III invaders from Belgic Gaul, one tribe at least being Atrebates from the neighbourhood of Arras.

Mr. Bushe-Fox, pointing out the distinction between the south-eastern region of Britain and the lands to the west of the forest of Anderida, has shewn how the former was occupied shortly before the campaigns of Cæsar by Belgic invaders known to us by the Swarling - Aylesford cremation culture, while such evidence as there is goes to shew that the latter were untouched by Belgic penetration until after the time of Cæsar.[2] It is certain that this penetration, which may be given the rough initial date of 50 B.C., is to be associated in the area under review with the typical La Tène III brooches and wheel-made bead-rim pottery, and probably also with the earliest local coinage; at least the earliest inscribed coinage known is that of Commius, and this fact combined with literary evidence makes the association of the whole movement with his name an attractive hypothesis.

Now of the two towns that were certainly cantonal capitals after the Roman Conquest of this western Belgic area, one, Silchester, was of pre-Roman foundation. May this not also be true of the other, Winchester?

Winchester stands on a sloping tongue of dry ground running right down to the Itchen from the chalk hills on the west, immediately opposite the steep bluff of St. Giles' Hill on the eastern bank of the river, and while this tongue rises for the most part well above the water-meadows above and below, it must be considered as a valley-site. Such sites on

1. Evans, *Coins of the Ancient Britons*, pp. 523-4.
2. *Swarling Report*, p. 30 ff.

low ground in valleys or plains, as opposed to hill or plateau sites, have often been credited with a Roman origin: such famous examples as the removal of the city of the Gallic Aedui from Bibracte (Mont Beuvray) to Augustodunum (Autun), which took place under Augustus, have suggested a regular Roman policy of deserting the old upland sites of native *oppida*, likely strongholds of national sentiment, in favour of new city sites of a more pacific character. But this has nowhere in Britain been attested by excavation, and if Winchester is a Roman foundation no such direct removal from St. Catharine's Hill can be suggested, owing to the much earlier abandonment of the latter.

On the other hand, if the first settlers on the Winchester site were the Belgæ of the 1st century B.C., it would be coeval with Silchester, and its date of settlement would be brought very much closer to that of the desertion of St. Catharine's Hill, even if not identifiable with it.

Several considerations have been advanced concerning the habitation-sites of the Belgic peoples.

Lieut.-Col. Karslake[1] credits them with a polygonal type of settlement: it is unfortunate that evidence from excavation is not yet available in sufficient quantity to test his theory, which accordingly we need not here discuss, but we must notice the remains of earthworks outside the later Roman walls of Silchester, claimed to be the defences of the Belgic city, without necessarily subscribing to the opinions based on their apparent form.

Dr. Curwen,[2] in considering the relation between the hill fort of the Trundle, near Goodwood, and the town of Chichester in the plain below, suggests that during the century or so of Belgic domination which preceded the Roman conquest a migration took place from one to the other. Valley-settlements, he points out, were the rule among Teutonic peoples, and if the Belgæ were of partly Teutonic blood this may have influenced the tendency to desert purely Celtic upland settlements, of which the possible supersession of the Maiden Castle by Dorchester and of Solsbury Hill by Bath may perhaps prove to be further examples. For German blood in the Belgæ we have the direct testimony of Cæsar (*B.G.* II, 4, 1-2), and it may be significant

1. *P.S.A.* XXXII (1920), p. 185 ff.: *Ant. Journ.* I (1921), no. 4, p. 303 ff.

2. *Suss. Arch. Coll* LXX, pp. 76-7. Dr. Curwen very courteously provided the writer with a typescript copy of this passage in advance

that it was in Belgic Gaul that he noticed the inhabitants' fondness for habitations near woods and streams (VI, 30, 3), especially as in S.E. Britain, which was, he tells us (V, 12, 1-2), peopled by immigrants from Belgic Gaul, whose houses and customs generally resembled those across the Channel (V, 12, 3, and 14, 1), he observed that woodland sites were chosen for fortified *oppida* (V, 21, 3).

Many fortified sites in N. France are in wooded country or near water, and if in the Belgic districts of Britain Bigbury (see p. 49 above) and Verulam, which Cæsar probably had in mind when he wrote, may be taken as typical woodland *oppida*—Silchester, too, is at least on the edge of forest land,—it may be that Winchester, like the other suggested examples, is situated in a valley because of the Belgic predilection for running water.

There are many 'woodland ringworks' in Southern Britain which have their analogies on the Continent, and valley-settlements were perhaps erroneously asserted by Déchelette [1] to be quite rare: they may easily be obliterated by the dwellings and agriculture of succeeding inhabitants, and Schumacher [2] has some interesting remarks on the continuity of habitation along the banks of the Rhine.

There is room for speculation concerning the Teutonic blood of the inhabitants of what is perhaps the most famous Continental settlement of this type, that of Manching near Ingolstadt in Bavaria,[3] but that it was this strain in the Belgæ that influenced their habits in the way suggested is still likely to be a valuable notion, for fondness for valley habitation is indisputably a Teutonic characteristic.

Of course, any more definite hypothesis that is forthcoming in the future will have to reconcile this idea with the existence at this same epoch of many hill-forts; it will perhaps prove to be possible to distinguish areas of comparative peace and war, and the greater size and numbers of La Tène III hill-forts towards the west in southern Britain rather suggest a shifting hostile frontier, like that between Celt and Teuton in Germany (see pp. 80, 156) between the Belgic newcomers and the earlier-established Celtic people of the south-west. At least these latter were, as we have seen, great hill-fort builders themselves, and the theory of warfare in Somerset between them and the Belgic newcomers has already been put forward in connexion

1. Déchelette, *Manuel*, IV p. 476.
2. *S.K.R.*, I, p. 224 ff., with taf. 10.
3. Déchelette *loc. cit.*, with reff.

with the evidence of destructive slaughter at Worlebury, the sudden end of the Glastonbury Lake-Village, and the possible occupation of such caves as Wookey Hole by refugees.[1] A great deal of excavation will have to be done before any such hypothesis can be definitely framed, but whatever the exigencies of tribal war may have been, it is permissible to believe that in the probably more peaceful regions which the sons of Commius seem to have ruled further east the pastoral and agricultural occupation of the uplands, already long established, as at such a site as Worthy Down, was continued along with an increase in the settlement of the river valleys, as on Chilbolton West Down, where close above the Test is a sizeable occupation-site dating from the Belgic period.[2]

At least a fairly large proportion of the finds of British coins have a lowland and valley distribution, and they are now seen to belong mostly if not wholly to the La Tène III period which we are considering. This is particularly true of such finds in Hampshire, where materials kindly supplied to the writer by Mr. G. C. Brooke enable him to speak definitely on the point. Save for one in the hill-fort of Danebury near Stockbridge, all the known coins from central Hampshire have been found off the main chalk uplands and near rivers. The sites of the finds are Alresford, Alton, Andover, Basingstoke, between Basingstoke and Odiham, Cheriton, Farnham, Petersfield, Romsey, Timsbury, Twyford and in and very near Winchester.

Though the find-spot is not in every case recorded with perfect precision, this distribution certainly suggests that the valleys were being increasingly settled and used as lines of communication, and it may well have been now that as well as the old ridgeways on the heights regular routes on lower ground, such as that later known as the Pilgrim's Way,[3] began to appear.

Trade must have been growing, and certainly this last century before the Roman Conquest is a likely time for the earliest occupation of a site like Winchester, which is the natural centre, no less than St. Catharine's Hill, of a wide area, and controls a unique ford where the Itchen, a direct avenue to the coast and its important harbours, was crossed by inevitable routes of communication between east and west (see map above, fig. 3).

1. *Glastonbury*, vol. II, pp. 683, 695: *Swarling Report*, p. 33.
2. Williams Freeman, *Field Archæology*, pp. 237, 423, with illustrations.
3. *Cf.* Hawkes in *H.F.C.* IX, pt. 3 (1925), pp. 324 and 330-1.

If there is anything in these contentions, a tempting theory suggests itself concerning the possible connection between the desertion of St. Catharine's Hill and the first occupation of Winchester. Returning to the idea, touched on above, that occupation on the Hill may have gone on later than the evidence actually recovered would allow, we might guess that it really did last on until the 1st century B.C.: it is then most plausible to see in the destroyers of its defences the invading Belgæ, who having ruined it to their satisfaction, proceeded, as at Silchester, to found a new *oppidum*, namely Winchester in the valley below, which the Romans a century later took over and remodelled as a provincial town and cantonal capital. This notion is attractive, but it is a mere hypothesis. Evidence may quite conceivably be found to support it, but at present it is desirable to insist on the arguments adduced above against allowing the terminal date of the Hill settlement to be put as late as that of the Belgic immigration. Given the material we have to go on, the place is far more likely to have been ruined in some nameless British tribal war. We know nothing, for instance, of the relations of the peoples of this region with their western neighbours.

There are then three possibilities as to the earliest settlement of Winchester. It was first settled either before the arrival of the Belgæ, by the Belgæ themselves, or by the Romans. That the second of these is the true one has already been seen to be quite likely on general grounds, and it cannot be considered less so if, as seems necessary at present, a gap has to be left between the abandonment of St. Catharine's Hill and the probable date of their arrival.

It is now time to review such archæological evidence bearing on the matter as is available from Winchester and the neighbourhood.

1. On St. Catharine's Hill itself, the only pieces of La Tène III pottery found were L.C. 1 and 2 (see fig. 17 and p. 138 above), which were lying unstratified in the Area, and are wholly inadequate as evidence of Belgic occupation.

2. On the N.E. slope of the Hill, 400 ft. beyond the earthwork, and 1,200 ft. E. N.E. of the clump of trees, a pit was located in 1928 by Mr. S. Ward-Evans [1] inside the Sewage Farm area. Below 18 ins. of turf and earth, a depression 21 ins. deep and 5 ft. across was found, filled with chalky soil above a

1. The finds with descriptive label are in Winchester City Museum.

black layer, which contained, besides bones, oyster-shells, flint flakes and pebbles that might have been sling-bullets, a coarse potsherd of Iron Age type, and the everted rim of a hard grey vessel of Roman date (probably 1st century A.D.). This perhaps marks the site of a peasant hovel which continued in occupation from an unknown Iron Age date into Roman times, but if so it is the only sign of habitation in the neighbourhood of the Hill after the ruin of the regular settlement upon it.

3. Directly opposite, on the other side of the Itchen Valley, is the slope of Battery Hill, where the new Winchester suburb of Stanmore has recently been built. At the earthwork called Oliver's Battery itself, no discoveries are recorded, though its prehistoric date is a reasonable presumption,[1] but some way below it to the N.E. late La Tène pottery was found near the surface in the infilling over the Hallstatt oven noticed above (p. 5, n. 1, 15), and not far from this in 1927 Mr. Ward-Evans certified the discovery of hut-circles, a large hearth formed of squared flints bedded in rammed clay, and similar pottery in association, as well as one or two flint flakes. Near by a more remarkable find was made: an oblong cist cut in the chalk and lined with clay, containing a skeleton lying extended, 5 ft. 10 ins. long: on one side of it was a tanged iron knife some 3 ins. long, and on the other a small iron sickle, with terminal flanges hammered over into a socket fastened by a rivet (greatest length under 2½ ins.). Sherds of pottery were also present, of rather coarse clay containing a certain amount of grit, but with a smoothed red-black surface: the ware is not evidently wheel-made, but the rim-fragments are clearly of the beaded type.[2] A La Tène III date is thus required for the burial, but it is anomalous, as the Belgic peoples regularly practised cremation at this time.[3]

A very similar burial is recorded at Sheepwash, near Freshwater, Isle of Wight,[4] where in a cist formed of slabs of Bembridge limestone the skull of what had clearly been an extended skeleton was found with a typical La Tène III pot of bead-rim type with eyelet handles.

1. See fig. 3 above. Godwin (*Civil War in Hampshire*, pp. 174, 342) however suggests that this was the fort or "great sconce" built in 1644 before the battle of Cheriton by Lord Hopton, when Waller's forces threatened him from the East, and the Parliament also held Southampton. In form it hardly suggests a 17th century military work, but the Field Club's forthcoming excavations may be expected to settle the matter. For the operations of Cromwell in 1645, to which the earthwork can hardly be attributed despite its name, see below, p. 179.

2. These finds with descriptive label are in Winchester City Museum.

3. Déchelette, *Manuel* IV, pp. 520, 543.

4. *P.S.A.* XXV, p. 189.

It is absurd to suggest a man "at whatever it is" to do that [illegible] at the Castle, from Oliver's Battery. (17th cent ordnance had not such a

To line a cist with clay would be natural in the Winchester district where stone is absent, and the two inhumations are clearly to be classed together; two explanations of them are possible. One is that the Belgic immigration, though it brought new fashions in pottery, did not at once change the custom of the previous inhabitants to cremation from the inhumation which they seem likely to have practised before. The other is to connect them with the Channel Islands, where several cist-burials of this type and period are known.[1] The island tradition of inhumation seems to have persisted from early megalithic times, and had its effect on immigrants, as these late La Tène people must have been, who habitually cremated. The iron weapons and La Tène III pottery found with the cist-burials of Les Issues and La Hougue au Comte, Guernsey, are unmistakable, and the same is true of those on the Catioroc in the same island, where also a sickle very like the Battery Hill specimen was found. If among the La Tène III immigrants from Gaul into this part of Britain there were some from the Channel Islands who had there learnt to exchange their custom of cremation for inhumation in cists under the influence of the immemorial island culture, the Battery Hill and Sheepwash burials would be explained.

At any rate there was clearly occupation of La Tène III date, which may justifiably be called Belgic, on this hill outside Winchester on the south-west.

4. The village at Worthy Down, 3 miles north-west of Winchester, where a regular La Tène III Belgic occupation immediately succeeded one of the previous culture of Middle La Tène and earlier date (see pp. 120, 169 above), needs no further consideration here.

5. On the slope immediately outside the west gate of the city is the open space called Oram's Arbour. Remains of earthworks formerly more extensive still exist here, and have often been guessed to be vestiges of defences of a pre-Roman settlement on the city site. That the British *oppidum*, if such there was, would be larger than the later Roman city might be supposed on the analogy of Silchester and perhaps of the Lexden earthworks outside Colchester, but the history of a site so close to a city like Winchester requires careful sifting before any such assumptions are entertained. The evidence is as follows:

1. Kendrick, *Archæology of the Channel Is.*, I, pp. 70, 90 ff., 190 ff.

(i) What may be the earliest remains on the site were discovered in the '80's of the last century in widening the railway cutting on its west side just south of Winchester Station: *i.e.* at the north-eastern end of Oram's Arbour. Six pits were found, 15 ft. in average depth, and at the bottom of each small quantities of wheat.[1]

Such granary pits as are known in this country are normally of the Early Iron Age: the type is in fact that of the storage-pits found on St. Catharine's Hill, and these pits may easily be of the same date. But there is no record of associated datable objects, and of course no reliable correlation with the earthworks.

(ii) A few yards from the south end of the existing remains of the latter Mr. Ward-Evans once found some sherds of hand-made pottery at a depth of 4 ft. on land not built over till recently. This is a good way from the site of the pits, and the find by itself is, though fairly suggestive, really only slender evidence for pre-Roman occupation on the Arbour site. Anyhow there is yet no support for the theory that the earthworks belonged to a large *oppidum*.

(iii) In 1838 the cutting for the main railway line to Southampton was made all along the east side of Oram's Arbour between it and the city walls and Castle, and a large number of rubbish pits were found, from 30 to 40 feet deep.[2] The finds clearly show these to have been Romano-British: coins, brooches, statuettes and pottery, along with animal bones and other refuse, leave no doubt on the point. As it was in an extension of this same cutting that the supposed granary pits were found, and the whole area was plainly devoted to rubbish-shooting by the people of Roman Winchester. The question of prehistoric occupation clearly requires cautious handling, considering the nature of the evidence: all the pits may in fact be Roman. Actual discoveries, then, are not really conclusive, and certainly do not help to date the earthwork.

(iv) There is good documentary evidence for the antiquity of the earthwork, but none for a date before early Norman times. In the *Liber Winton*, or 'Winchester Domesday,' a survey made between 1103 (or very possibly 1107) and 1115,[3]

1. *New Illustrated Guide to Winchester* (1893), p. 109: W. T. Warren, *Guide to Winchester* (1902), p. 1: *id.*: *Notes from History of Winchester* (1914), p. 5.

2. *Gentleman's Magazine*, Oct. 1838, pp. 371-2.

3. See Round in *V.C.H. Hants*, 1, pp. 571-2. The chronology turns on dates in the known careers of the men commissioned with the survey. The writer is indebted to Canon Goodman for an opinion slightly modifying Round's view.

a *domus hauoc*, or hawk-house, is mentioned as outside the West Gate and situated '*inf*° *II fossatum*' [1]: clearly there was another ditch outside this gate as well as the city ditch proper at the beginning of the 12th century, and though Woodward [2] is wrong to suggest the assumption that it was there in the time of Edward the Confessor, it is presumably the same as the 'Bar-ditch' of the Winchester Tarrages of 1416-7,[3] which extended right round the west side of the city from near St. James' Chapel on the south to a point in a field east of Hyde Street nearly half a mile beyond the north gate, and marked the boundary of the ancient City Liberty. Godson's map of 1750 shows part of the same ditch running along the edge of Oram's Arbour, where it also marks the west boundary of St. Thomas' parish.

(v) The earthwork still existing at Oram's Arbour is likely to be the remains of this, though it is much curtailed and the ditch has been filled up; the Arbour has always been an open space, but since the time of the *Liber Winton* other earthworks have been put up in it on perhaps three occasions.

In 1141 the Empress Matilda was besieged in the Castle by the army of Stephen's Queen, and it has been suggested [4] that the Arbour earthworks were the work of the besiegers. We have seen that anyhow one ditch was in existence already, but it is a possible guess that trenches were dug on this occasion that might confuse later topographers.

Between October 1643 and March 1644 the Royalists holding the Castle greatly strengthened its defences,[5] and it is quite likely that their outer lines trenched on the Arbour area.

In September 1645 Cromwell appeared before the Castle and spent five days making 'batteries' against it, evidently on the west. There is a fairly strong tradition for identifying these with trenches at the north-west corner of the Arbour, and perhaps all of Cromwell's work has not been obliterated. The site is thus clearly not a promising one for the identification of earthworks of any one of these several possible dates.

The evidence concerning Oram's Arbour may then be summarized as follows:—

(*a*) Discoveries claimed to be prehistoric are suggestive rather than conclusive, especially in view of the disturbance of the site by Roman rubbish-pits.

1. *Record Comm. Domesday*, vol. IV (Addt.), 1816, p. 537 (fol. 7 b).
2. *History of Hants*, I (1863), p. 31
3. B.M. Add. MS. 6133, fol. 31, 33, 34.
4. *History of Winchester* (Anon. 1773), II, pp. 54-5.
5. Godwin, *Civil War in Hampshire*, pp. 123, 174, 342, *cf.* p. 333.

(*b*) Though an earthwork existed here in the early 12th century which may be identified with that which in the early 15th century ran all round the west of the city and marked the boundary of the Liberty, yet greater antiquity than this cannot be claimed for it.

(*c*) Possibly in the 12th and probably in the 17th century the site was disturbed by military earthworks which have been a likely source of confusion.

In fact, the satisfactory discovery of a piece of first-class archæological evidence will be required to substantiate the theory of Oram's Arbour as a prehistoric site. It is impossible to argue to the likelihood of a prehistoric date for the earthwork from the fact that it was the boundary of the City Liberty; in default of direct evidence, it can only be supposed to have been dug for that purpose in early mediæval times.

6. It has seemed worth while to devote this space to making it clear exactly how much can be affirmed about the antiquity of Oram's Arbour, in order to bring popular theory into line with fact: having now seen what evidence there is for prehistoric occupation on the slopes immediately above the city, we must consider that from the city itself.

A. As it is situated on the approach to an important ford over the Itchen, we may be prepared for a certain number of finds belonging to earlier prehistoric periods which need not be taken as evidence of anything like settled occupation.

(i) A few isolated Stone and Bronze Age implements need not here detain us, but there is one important early find which deserves mention here, as it has never been properly published, and the brief existing notices of it are by themselves open to misconstruction. When the Star Inn (83 High Street) was rebuilt in 1885, five oblong cists were found beneath the Roman level in the clayey gravel underlying the site, at an average depth of 11 ft., the deepest being at 13 ft. 6 ins., below the pavement.[1] They were plastered all round with clay, and contained skeletons buried in an upright squatting position, two of which had between their legs the skeleton of a fowl. One of the cists contained three skulls, another none. There had evidently been some disturbance, and a Roman coin, some nails, and one or two pieces of bronze brooches were suspected

1. Their lengths and breadths were as follows:—Nos. 1 and 2, 5ft. by 2ft.; No. 3. 5ft. by 2ft. 6ins.; No. 4, 5ft. by 3ft. 6ins.. No. 5. 9ft. by 3ft. The longest measurement was in every case from north to south.

(no doubt rightly) of being intrusive; however, this was apparently not the case with "a very elegant whetstone or hone, perforated to wear round the waist, and part of a rougher one," which may be taken as the one reliable associated find. The architect in charge was the late Alderman Stopher, a keen amateur antiquary, and two MS. memoranda, with a plan, which he made of the find, are preserved in the Winchester Public Library, the only other description being in the *Hampshire Chronicle*, June 13, 1885.[1] These documents are not wholly reconcilable with each other, and no measurements of the skulls were taken, but on such of the evidence as is reliable the cists may safely be ascribed to the Early Bronze Age, of which contracted burials and whetstones pierced for suspension are typical: such skeletons are usually huddled on one side, but an upright squatting posture is not unknown, though the presence of fowls seems to be unique. All that requires notice here is the rashness of connecting these contracted cist-burials with those known elsewhere to be of the Early Iron Age.

Of these, the Worthy Down example,[2] which belongs either to La Tène II or III, is differentiated by its peculiar form, the absence of grave-goods, and the position of the huddled skeleton on its back, from those of the distinctive south-western Celtic area of Britain, of which contracted burial seems at this time to be especially characteristic,[3] as at Harlyn Bay, Cornwall.[4] But whetstones have not been found in these graves, and in any case neither the centre nor the west of southern Britain produced carefully-finished and perforated whetstones at this period, as was observed both at Glastonbury and All Cannings Cross (see further p. 134), where those found were seldom intentionally shaped at all, very seldom perforated, and never in the least 'elegant,' whereas the Winchester specimen was clearly of the Early Bronze Age type described by Evans, *Ancient Stone Implements*, p. 242, and *Ancient Bronze Implements*, pp. 452-3.

These burials, then, which have so far been described by guide-books[5] as 'of uncertain date,' are to be referred to the Early Bronze Age, like that found under St. James's Terrace

1. Gratitude is due to the City Librarian, Mr. F. W. C. Pepper, F.L.S., for kindly providing the writer with copies of these documents through Mrs. E. E. Wilde, Hon. Curator of the City Museum.

2. *H.F.C.* X pt. 2, pp. 181-2.

3 Leeds in *Archæologia* 76, p. 236.

4. Crawford in *Ant. Journ.* I, no. 4, pp. 283-4.

5. Warren's *Guide to Winchester* (1902), p. 247, and *Notes from the History of Winchester* (1914), p. 5.

associated with a beaker now in the City Museum, and they may be ruled out of our discussion of the possibility of Early Iron Age settlement in Winchester.

(ii) A Late Bronze Age bucket-urn [1] from St. Giles' Hill also requires no consideration here, though it indicates the presence in the neighbourhood of a people apparently allied to and not long preceding the settlers of St. Catharine's Hill (see p. 140 ff. above).

(iii) Similarly, a single hand-made fragment of pot-rim with finger-print decoration found by Mr. Ward-Evans below Great Minster Street does little to increase the likelihood of an occupation contemporary with that of St. Catharine's Hill.

(iv) The La Tène I brooch (see p. 127 above) found below the High Street in 1862, and now in private hands, can do no more than corroborate the obviously true supposition that the Itchen was crossed here in La Tène I times. The brooch, as belonging to the period and probably to the people of the St. Catharine's Hill settlement, is illustrated here as no 2 on Plate IX: it was first published by Dr. Cyril Fox in *Archæologia Cambrensis*, June 1927 (p. 80, fig. 11), whence by his kind permission and the Editor's the illustration is here reproduced: it is assignable to his Phase B, and belongs probably to the 4th century B.C.

(v) There are in the British Museum four iron currency-bars of the usual British Iron Age type (double unit), recorded as being 'from Winchester,' [2] but no more precise record of the discovery (in 1853) exists, and in view of the well-known find of similar currency-bars on Worthy Down, it is quite possible that these came also from that site.[3] In any case the discovery of such a hoard in isolation could do little towards attesting an occupation-site.

Thus finds from Winchester of earlier prehistoric periods than the Belgic immigration are neither in quantity nor character such as could afford any grounds for belief in any settled occupation.

B. We now have to consider those of the Belgic period.

(i) In 1927 building excavations disclosed a number of inhumed burials of the Constantinian age in what had clearly

1. See fig. 3 and note, p. 5 above.
2. *P.S.A.* XX, pp. 183, 185.
3. *Ant. Journ.* I, no. 4, p. 321 ff., esp. p. 326.

been a Roman cemetery alongside the Roman road to Mildenhall (Cunetio) on the north-west of the town, 80 yds. from Hyde Street. Beneath these were found 'several ancient British burials, all of which were in chambers dug in the solid chalk. Some of the cavities were clay-lined and contained crude pottery of pre-Roman date, probably 1st century B.C.; the marks on the chalk shewed that iron tools had been used.'[1] Mr. Ward-Evans is able to state that these cists contained cinerary urns of bead-rim type, and though the pottery has now unhappily been destroyed, there can be little doubt that this was a cemetery of the regular La Tène III cremation culture, which may be attributed to the Belgæ of the century before the Roman conquest. As the later Roman cemetery of Venta Belgarum was on the same site, we may guess that the people who made the Belgic cemetery lived on the site of Winchester. It is well, however, to allow for the possibility that the graves may date from just after and not just before the Roman conquest, as the pottery is beyond reach of further examination.

(ii) In the same year 'many pieces of Roman and Celtic pottery' were found sealed below the metalling of a Roman street 18 ins. thick, 7½ ft. beneath St. Peter's Street. Such further information as is available about this pottery goes to shew that it was wheel-made coarse ware of bead-rim type, some of which might be as late as middle 1st century A.D., but the rest of which could be dated in the preceding century. Its stratification below Roman street-metalling is an important fact.

(iii) At recent excavations in the Broadway the Roman level could be clearly established at a depth of some 12 ft., and below this plain evidence of pre-Roman occupation was found, namely lumps of clay daub, several bearing wattle-marks, burnt flints, and fragments of black pottery of rather coarse manufacture but without any very characteristic features, a notched boar's tooth, an antler-tine tool, and a horn-core, piece of skull, and scapula of *bos longifrons*. The mean level of this group of finds was 14 ft.

(iv) Some light is thrown on this group by the recent discovery below the Roman level in St. Clement's Street of four sherds of similar ware associated with a fragment shewing the base of a black cooking-pot and four pieces of wheel-made pottery with bead-rims. The ware had a rather soft smooth

1. *J.R.S.* XVII, pt. 2, p. 207. 2. *J.R.S. ibid.*

grey surface, though there was a little grit and sand in the clay, and the pieces are clearly of the Hengistbury I - J type, which belongs to the Belgic people of round about the beginning of the Christian era.

(v) On a site in the western half of the city there has recently been found at a depth of 14 ft. (*i.e.* below the lowest Roman level) nearly half of a small bulging bowl with short everted rim and a very slightly convex base. The bowl is wheel-made and of soft grey clay, with a little flint grit in the body but a smooth surface. It resembles a piece from the La Tène III rubbish-dump at Oare (*W.A.M.* XXXVI, p. 125, pl. VI, B), and may be definitely ascribed to the same period.

(vi) A piece of a bead-rim cooking-pot resembling *Hengistbury*, pl. XXII, class I, no. 6, dated to the later 1st century B.C., was found early in 1929 below the Roman level, near the centre of the city: the ware was of the same quality as (v).

(vii) A piece of a squat bead-rim bowl, resembling the rim of *Hengistbury*, same class, no. 1, has also been found not far away at the same low level: it is wheel-made, of soft grey clay, and with hardly a trace of sand or grit.

(viii) From this low level also come two pieces of wheel-made grey ware covered with a rough comb-striated pattern (cf. *Richborough* II, pp. 97-9, with pl. XXIX).

These cannot be certainly called pre-Roman, but may quite easily be so, as the ware, though lasting into the Flavian period, was introduced by the invaders of the 1st century B.C.

(ix) Two potsherds, one shewing the base-angle of a cooking-pot resembling that from St. Clement's Street (iv), were found in 1927 at a corresponding level below the High Street near the Old Guildhall. With them were associated bones and horn-cores of *bos longifrons* and a tapering iron dagger rusted into a sheath faced with bone with an iron mouth-band, two iron rivets, and a pattern of two rows of incised circles with central dots. The breadth at the mouth is about 1 in., the length nearly 5 ins., the sides tapering slightly towards the lower end, which is bluntly curved. This is in the Winchester City Museum: its correct date is probably in the early years of the Christian era, as is indicated by the blunt end without chape: cf. *B.M. Early Iron Age Guide*, p. 108, and pl. IX, 7 (La Tène III scabbard from the Thames): Continental exx. in Déchelette, *Manuel*, IV, fig. 460.

(x) A recent excavation in the S.W. corner of the city has produced from below the Roman level pottery which may be of La Tène III date, associated with burnt flints, and animal bones, especially of *bos longifrons*. All these pieces of pottery resemble examples from the second period at Worthy Down, attributed to Belgæ of the La Tène III period.[1]

(xi) During the underpinning of the Cathedral in 1905-12, a bronze ring was found embedded in the peat, 10-12 ft. below the surface near the south-east angle of the South Transept: it was well made and had a wavy pattern in a groove round the middle of the outside, in the 'Late Celtic' style. It was possibly a harness ring and may be ascribed to the 1st century, perhaps about 50 B.C.[2] It may be noted that the Roman remains found in this area were only about 8 ft. deep.

(xii) In the City Museum there is a chalk cup or lamp not unlike that from St. Catharine's Hill (fig. 15, 2) but more competently shaped. It was found by Alderman Stopher at the rear of the old Guildhall, and though definite dating is impossible, it might well belong to the same period as the pottery above considered.

(xiii) Three British coins and one Gaulish coin of the same period have been found in the City: in describing them, the writer has had the benefit of the opinion of Mr. G. C. Brooke.

(*a*) *Evans*, F 13. A silver coin typical of the area associated with coins of Verica, a son of Commius (see above, p. 171), and presumably of about his time (*i.e.* beginning of the Christian era). Found in Staple Gardens and preserved *penes* Messrs. Warren.

(*b*) Another coin of base metal, with obverse inscription COMF (i.e. *Commi filius*) and reverse inscription perhaps of Verica, was found in the city and presented to the City Museum by Alderman Stopher. It may be assigned to the same date.

(*c*) *Evans*, F 4. A silver coin recently found and communicated by Mr. Ward-Evans. It is characteristic of Evans' 'south-western district': the type is the first of the five successively degenerating types, *Evans*, F 4 - F 8, which he puts among the latest of the British series. It cannot be dated much before the Christian era.

1. *H.F.C.* X. pt. 2, pp. 186-7, plates IV-V.

2. Vaughan, *Winchester Cathedral Close*, pp. 4-5. The writer is indebted to Mr. Ward-Evans for calling his attention to this passage. The ring is preserved in the Cathedral Library.

(*d*) The Gaulish coin (*Atlas* 9340) is silver and probably of the Helvetii; it may well be 1st century A.D., but the second half of the 1st century B.C. is the most likely date. Trade with Gaul was no doubt responsible for the appearance of many such coins in Britain at this period.

The distribution of such coins in the neighbourhood has been commented on above (p. 174): the presence of these in Winchester must strengthen the evidence for contemporary occupation. In addition, a coin, probably of base gold (*Evans* II, 7), of Tincommius, another son of Commius, was found "in the immediate vicinity of Winchester" (*Evans*, p. 169).[1]

(xiv) Two finds of Egyptian Ptolemaic coins were made in the city early in 1929. One was of two coins of Ptolemy III and IV on a Roman site with a Roman pin and Roman coins, and may thus be ruled out, but the other was of a coin (Svoronos 974) of Ptolemy III (B.C. 249-222) discovered near the centre of the city at a low level (communicated by Mr. Ward-Evans). Though many of the Ptolemaic, Greek, Carthaginian and Roman Republican coins found in Britain certainly found their way into the country in the Roman period, or even in modern times, the possibility that some came in in the course of pre-Roman trade need not be overlooked. The bulk of them come from the southern and eastern region of the country, where evidence of such trade is to be expected (*cf.* finds of Italian bronzes and brooches), and that the presumption is reasonable, in default of evidence to the contrary, has the support of Dr. G. F. Hill: it may thus be extended to this coin.

The writer owes a deep debt of gratitude to Mr. S. Ward-Evans, who made the compilation of this list of early remains possible by permitting the inspection of specimens in his possession. It is to be hoped that his patient work of inspecting excavations made in the city will one day enable it to be considerably extended: meanwhile we are confronted with a small but noteworthy body of pre-Roman La Tène III material, which where disturbance is absent is found to underlie Roman, Saxon, and later remains. Further, as might be expected, most of the finds have been away from the marshy eastern side of the city by the river.

It is not desirable to attempt to infer too much from this evidence, but that it should exist at all on such a continuously inhabited site is surely significant. It is just the sort of evidence,

1. This is apparently the same coin as that wrongly described in *H.F.C.* IV, p. 145, as found 'at' Winchester.

for instance, which has never been properly forthcoming from London: there, as matters stand, a pre-Roman native occupation is no more than a guess, while the Winchester material, scanty as it is, is enough to point the contrast.

The earliest accepted Roman material from the city, pottery of the middle 1st century A.D., accompanied by coins of Claudius and Nero, can be readily distinguished in technique from the sherds we have been considering, and though it must of course be conceded that much native potting continued to some extent unchanged in the early years of the province of Britain, yet the pre-Roman date of most of the material here presented is confirmed by the low level at which it has been found. It would no doubt be too much to say that the case for pre-Roman occupation has been abundantly proved, but on this evidence it may be considered a fairly reasonable working hypothesis. At any rate the wattle-marked clay daub from the Broadway is adequate evidence as far as it goes, and strengthens the distinction between the settlement of the century preceding the Roman conquest and the sporadic traces of man's presence in the earlier prehistoric periods.

But it would be extremely rash to argue that the Belgæ must have established a tribal *oppidum* at Winchester. If there was a settlement there is no reason why it should have been more than what we should call a village. The argument suggested above may lead us to think that while most of the upland villages already existing, like Worthy Down, continued and flourished during the Belgic occupation, the invaders are likely to have often chosen woodland or valley sites for new settlements, and that Winchester was one of these; but the idea of a tribal capital is guesswork only.

The Belgæ of Gaul, who were descended from the mixed Celto-German population formed round the Lower Rhine as explained above (pp. 152-3), were not a tribe but a confederation of tribes, all of which may have been represented among the invaders of Britain. The Atrebates were the strongest, and their kings (the Commius dynasty) were paramount, as their coins shew; it is likely that the lands south and south-west of theirs were peopled by many small tribal groups which were only unified into a single canton by a Roman decree after the conquest, so as to form one of the regular units of local government, under the generic name common to them all. It was thus very possibly the site of one among many village

communities which the Roman authorities decided, in virtue no doubt of its geographical position, should become the cantonal city of Venta Belgarum. At least for the present we must not equate it with Silchester, already an *oppidum* of capital importance, and probably the only one in the whole district, as being the seat of the Atrebatic kings who ruled over all these Belgic peoples.

We may believe that the Romans found the site of Winchester inhabited, but no more.

As for St. Catharine's Hill, we have seen how unsafe it is on present evidence to assume any direct migration from it to Winchester, whether or no connected with the arrival of the Belgæ. For the present we had better believe that when they appeared its day was already past.

At least from the early Roman period onwards it has merely been a remarkable hill on the outskirts of a sizable city. It is credible that there were peasant holdings on its slopes, as on Battery Hill across the river, but within the old earthwork a couple of potsherds do little to suggest Belgic occupation, and in the breakage of a few Romano - British pots and the loss of a brooch and of a coin we may be content to see the relics of the picnic-parties of the citizens of Venta Belgarum, who must surely have climbed the hill for the pleasure of a summer afternoon, just as their successors of Winchester do to-day.

PART TWO

THE MIDDLE AGES

" Ther was a very fair Chapelle of S. Catarine on an Hille scant half a mile without Winchester Toun by South. This Chapelle was endowid with Landes. Thomas Wolsey, Cardinal, causid it to be suppressid, as I hard say."

John Leland (writing between 1536 and 1542).
Itinerary (ed. 2), 3, 87.

PART TWO
THE MIDDLE AGES

ST. CATHARINE'S CHAPEL

Introduction: Literary evidence for the history of the Hill and Chapel.

As has been already mentioned in the general introduction, the attempt to recover knowledge of the site and character of St. Catharine's Chapel was the origin of the excavations recorded in this volume, and in the following pages a summary is given of the results of that work, which during the first two seasons, 1925 - 1926, formed the sole objective of the authors, and during the following two seasons was continued and completed simultaneously with the examination of the prehistoric remains on the Hill of which an account has been given in the first part of the book. Four seasons' work have therefore been spent on the structure of the chapel, and while it will be clear from what follows that there are certain problems connected with the building which cannot be regarded as finally solved, yet it is, we believe, unlikely that much more light can be thrown on them so long as the site continues to be covered with the clump of beech trees which at present makes so conspicuous a landmark of the Hill, and whose roots are no less deeply embedded in the fabric of the chapel than they are in the sentiment of the Wykehamical body. The apparent incompleteness of the plan is in fact not due to the incompleteness of the investigation, but to three unavoidable difficulties: the existence of the trees, the fact that the walls, being built straight on to the solid chalk, have no foundation trench, and the thoroughness with which some sections of them have been grubbed up. On the other hand, in certain parts, notably the piers of the crossing, one of which has still seven feet of masonry, the building is in a remarkable state of preservation; all the more so when it is remembered that any material traces of it were said to be undiscoverable by the local historians of the early 19th century,[1] and that its very position was not certainly known until the excavations of 1925 had been in progress for

1. "Not the slightest vestige of this building is now discoverable." Duthy, *Sketches of Hampshire*, p. 246.

a week. And while in point of scientific value this part of the work has less importance than the prehistoric sections of this report, yet it may not be without interest to put on record the details of a mediæval building which must have had considerable claims to architectural merit, and whose surprisingly large size made the Hill which bears its name for four centuries even a more striking landmark to travellers in the Itchen valley than it is to-day.

The story of the Hill in the early Middle Ages can be very briefly told. It was in all probability [1] included from the first in the great Chilcombe property which formed from the time of King Kinegyls of Wessex (608 - 634) onwards the chief endowment of the Christian Church in Wessex. With the detailed history of the famous " Hundred Hides of Chilcombe " we are not here concerned, but if the story contained in the Annals of the Church of Winton and the Winchester Chartularies,[2] spurious as most of the earlier charters apparently are, can be relied on in its main outline, St. Catharine's Hill and the Chilcombe Manor have been Church property with but slight interruptions for nearly thirteen hundred years. The so-called Manor was in reality an agglomeration of numerous properties at Easton, Avington, Ovington, Tichborne, Kilmeston, Stoke, Brambridge, Otterbourne, Twyford, Coldhannington and Nursling, and from the time of Athelwulf (856) it was rated for taxation purposes at one hide only. Many of these properties were of considerable size, and Chilcombe itself contained at the time of the Domesday Survey [3] no less than nine churches, those probably of Winnall, Morestead, Compton, St. Faith's, St. James' (or White Minster),[4] Littleton, Sparsholt and Weeke,

1. It has been suggested (*e.g.* by Win. Coll. Arch. Soc. in *Winchester, Its History, Buildings, and People*, ed. 1, p. 11 : ed. 2, p. 13) that a passage in *Annales Monastici II* (Rolls Series), p. 16 : " Rex Cnutus dedit Wintoniensi ecclesiae terram trium hidarum quae vocatur Hille " may have reference to St. Catharine's Hill, which is still known to Wykehamists simply as " Hills," and so may mean that it was only included in the Chilcombe property in 1035. But there are two objections to the identification :—

1. Three hides is far too large an assessment. The area of the Hill is only 100 acres, and three hides on the usual reckoning would apply to an area of about 360 acres.

2. Both Chilcombe and Twyford were part of the Manor from the first, and the Hill must have been in one of these parishes and so have been Church property already The Chilcombe - Twyford parish boundary runs along the valley S. and S.E. of it (see p. 1 and fig. 1 above).

2. The Winchester Chartularies are in B.M. Add. MSS. 15,350 and 29,436. See Dugdale's *Monasticon* (ed. Caley, Ellis, and Bandinel, 1817) I, 218, for details.

3. *Domesday Book* I, 41.

4. The inclusion of St. James', which as a parish church dropped out in the 14th century, is due to information from Canon Goodman. It disposes of the argument which has been based on this passage that St. Catharine's Chapel was in existence in 1086 and was in fact the ninth church. There is no literary evidence for believing that the foundation is pre-Conquest, and hardly a bare possibility on other grounds (see below, pp. 256-7).

besides the parish church: St. Catharine's Chapel was therefore associated closely both with the Bishop of Winchester and the Cathedral monastery of St. Swithun to which the Manor belonged, and with the parish church of Chilcombe to which it was directly attached, and it is mainly from documents connected with St. Swithun's and with Chilcombe that our knowledge of it is derived.

The history of the chapel, however, so far as it is known to us from literary sources, is a very meagre one. No record of its foundation appears to exist, and no trace of the landed endowment attributed to it by Leland has been found. It is barely possible to assume on archæological grounds that the early chapel at the east end of the main building, whose remains will be described below, is of pre-Conquest date, though it was extensively added to within little more than half a century of 1066, but there is nothing at all substantial to go upon. In fact the first certain mention of the chapel is not until 1284, when Edward I granted to John Pontissara, Bishop of Winchester, a quit claim to a quantity of disputed property which included the advowson of the Church of Chilcombe with the Chapel of St. Catharine.[1] In the Taxation of Pope Nicholas (1291) the "Ecclesia de Chiltecumbe cum capella" is rated at £6. 13*s*. 4*d*.[2] In the register of Bishop Pontissara (1282 - 1304) the connection with Chilcombe is again emphasized—"Collatio de Chiltecumb Henrico de Rowadon diacono ecclesiae de Chiltecumb cum capella Sanctae Katerine."[3] One 13th century incident has been attributed, with perhaps too little reason, to St. Catharine's Chapel.[4] We are told that in January 1268 there was such a violent wind in Winchester that it overturned trees, and laid low houses and churches, with the bell turret of St. Catharine.[5] This may of course refer to our chapel. But in the Taxation of Pope Nicholas there is mentioned a Church of St. Catharine in Winchester itself, and though nothing else is known of its existence, it is perhaps as likely as the Chapel on the Hill to have suffered damage to its "tintinnabulum" or "campanile."[6] The connection of the chapel with St. Swithun's

1. Calendar of Charter Rolls, 1257 - 1300, Vol. II, p. 273.
2. *Taxatio Ecclesiastica* (Record Commission), p. 210.
3. B.M. Add. MSS. 5830, fols. 45-7. Coll., 3 v.
4. *V.C.H. Hants* V, p. 75, note. It is wrongly dated 1286.
5. *Annals of Winton*, Rolls Series, p. 106: "Item xix Kal. Feb. Ventus vehemens ita quod arbores evelleret, domos prosterneret, et ecclesias cum tintinnabulo Santae Katerinae."
6. The word used in the parallel passage in *Annals of Waverley*, Rolls Series, p. 375.

is well illustrated by the inclusion in a Roll of Perquisites of the Prior, dated 1331, of "all oblations coming in the Chapell of St. Katherine, by Winchester, on her feast" (25 Nov.) "as well by day as by night," and he was entrusted with the keys of the chapel during this period.[1] When at the Dissolution of the Monastery the Prior is given a pension of 26*s.* 8*d.* from the Church of Chilcombe, we may perhaps see a ghost of this earlier annual source of income.[2] Finally with a reference to "Chiltecombe with exempt chapel," valued at ten marks as in the Taxation of Pope Nicholas, from Wykeham's Taxatio Ecclesiastica of the Winchester Diocese (1335-45),[3] we close the scanty list of literary references from the mediæval period.

Of the last years of the chapel it is possible to reconstruct the history with some detail. Leland, who visited Winchester between 1536 and 1542, writes as follows: "Ther was a very fair Chapelle of S. Catarine on an Hille scant half a mile without Winchester Toun by South. This Chapelle was endowid with Landes. Thomas Wolsey, Cardinal, causid it to be suppressid, as I hard say."[4] Whatever the exact date of the writing of these words may have been, Leland's visit was in any case some years before the passing of the Chantries Acts in 1545 and 1547 under which such foundations as the chapel would have fallen, and, as we shall see in a moment, the Prior and Convent of St. Swithun's were already leasing it to a lay tenant as early as 1538. There is therefore independent evidence that the chapel was suppressed earlier than similar buildings of its type, and there is no reason to doubt Leland's statement that Cardinal Wolsey was responsible. As early as 1524-5 the Cardinal suppressed a number of small monasteries, and transferred their endowments to his projected Colleges at Oxford and Ipswich. But it does not seem likely that St. Catharine's Chapel fell at this time, for the institutions affected seem all to have been monastic, and not only is there no mention of any lands derived from this source in the Christ Church Book of Evidences, but there is no Christ Church property at all in the neighbourhood of Winchester which could be accounted for in this way.[5] The landed endowment mentioned by Leland has, in fact, disappeared, and it would be difficult if not impossible to trace it

1. B.M. Add. MSS. 29,430, quoted by Leach, *History of Winchester College*, p. 185.
2. *Valor Ecclesiasticus*, Record Comm., Vol. VI, App. VI, p. 10.
3. Hants Record Society, *Wykeham's Register*, I, p. 364.
4. *Itin.*, ed. 2, 3, 87: *V.C.H. Hants* III, 315.
5. See Dugdale, *Monasticon* II, 138-9, for the sources of Christ Church property.

now; its fate is probably typical of that of many small Church properties which were secularized more or less surreptitiously in the confused years of Henry VIII's reforming zeal. A more likely date for the confiscation is 1528-9, for in 1528 Wolsey was himself appointed to the See of Winchester *in commendam*, and was installed by proxy in 1529, shortly before his fall. There is no mention of the matter, it is true, in his Episcopal Register, but it may well have been thought a somewhat equivocal subject for insertion in an official record.

Whatever the exact date of the suppression may have been, we learn from the Obedientiary Roll of St. Swithun's that in 1536-7, seven years after Wolsey's fall, the Pentecostal oblations from the chapel amounted to nothing at all.[1] If the Rolls between 1528 and 1536 were not lost, we could perhaps tell whether this implies that an attempt was made to keep up the services after the endowment had disappeared, but that congregations were no longer forthcoming, or that the clerk was merely using an old list of sources of revenue, regardless of the fact that that particular item had permanently dried up owing to Wolsey's suppression of the endowment at least seven years before. In either case it indicates the end of the Chapel's religious history—for from the following year, 1538, there is an unpublished indenture in the Cathedral archives between "William Basyng Prior and the Convent of Saynt Swithunes of the one partye and Thos. Wryothesley of Tycchefeld esquyer" by which the Manor of Prior's Barton was leased to the latter "with the proffets growing and comming of the fayre called Mawdelyn Fayre for the tyme beynge, and also Seynt Kateryn's Chapell with the cymytorie dycched abowte the same."[2] The lease was renewed in 1542 in the same terms when the "first original and modern" Dean and Chapter of the new foundation replaced the Prior and Convent of the old.[3]

Thomas Wriothesley (1505-1550), the first lay tenant of the site, who later became Earl of Southampton and Baron Titchfield, was almost certainly responsible for the destruction of the fabric of the chapel, and an examination of his career enables us to date its demolition with some accuracy. He was

1. Edited by Kitchin, 1889: pp. 16, 20, 28. "de oblatione stationum sanctae Katerinae supra Montem . . . . hoc anno nihil."

2. *Winchester Cathedral Register* (or *Enrolments*), 20 Sept., 30 Hen. VIII, Book II, fol. 85. Information kindly supplied by Canon Goodman. On the identity of the "cymytorie" ditch, see below, p. 229.

3. *Dean and Chapter Register* III, fol. 20, 1 Aug., 34 Hen. VIII.

one of the most unscrupulous of the new Tudor nobility who were enriched with the spoil taken from the monasteries, and, as we see from his connection with our story, he also obtained leases of Church property which was not actually confiscated, with a view to profiting by the sale of materials from the destruction of unwanted buildings. Between 1536, in which year he became Coroner and Attorney in the King's Bench, and 1538, he was granted property belonging to the monastery at Titchfield, to Quarr Abbey, to Beaulieu Abbey, and Hyde Abbey at Winchester, and we are told that he pulled down the buildings "with amazing expedition and sold the rich materials." [1] This destructive zeal won him the enmity of Bishop Gardiner, but in 1540 the two men were reconciled and Wriothesley, having apparently made his pile, abandoned his iconoclastic fervour in favour of more peaceful but no less influential activities. In 1542 he is described as "governing almost everything in England."

As we have seen, it was not until 1538 that he obtained the lease of St. Catharine's Chapel, and its demolition must therefore be dated between that year and 1540, when his destructive activities came to an end. Plenty of evidence of the destruction and its systematic character in certain parts of the building will be found in the description below, and it is worth noticing also that, systematic as it was, it bears all the evidence of having never been finished. Thus while the roof slates were carefully piled at the west end and elsewhere, and while parts of the nave were completely pulled down and even their foundations grubbed up, yet three of the piers of the crossing were left standing several courses high buried under nine or ten feet of collapsed masonry, and the south transept was walled off from the rest of the building and apparently retained for secular purposes for some years. It may be suggested that Wriothesley's abandonment of his iconoclastic habits in 1540 is reflected in this incomplete destruction. He obtained his lease of the site only in the autumn of 1538: before the work of demolition was finished he had changed his plans, and in 1540 the half-destroyed ruins of the chapel were deserted save for the south transept.

There is no reason to believe that the use of the latter for lay purposes was prolonged. For the ensuing phase of the history of the Hill, when it was used as the playground of Winchester College, the earliest evidence is that of Christopher

1. *Liber Monasterii de Hyda*, Rolls Series: Introd., p. lxxiii.

Johnson's *Themes* (*c.* 1565),[1] and it was probably ruinous if not demolished before that date. The surviving walls were buried beneath their own fallen masonry, and the centre of the site became the grass-grown mound which it has since remained.

The memory of the chapel quickly disappeared, and even its precise site was forgotten. No map of the 17th or 18th century appears to be aware of its existence, and the same may be said of such literary accounts of the Hill and its surroundings as may be found in Mathew's poem of 1647.[1] In 1762, as is narrated elsewhere, the mound was adorned by Lord Botetourt with a clump of fir trees, the predecessors of the present clump of beeches, but no one seems to have realised at the time that it concealed the crossing of a large cruciform building. In 1845, however, the British Archæological Association met in Winchester, and in the heyday of the Gothic revival an August afternoon was spent by some of its members under the direction of the Rev. S. Isaacson in looking for the chapel, but in the words of the official report "foundations of no very early date were all that were met with."[2] It is clear that no proper excavation took place on this occasion, which was merely an afternoon excursion, in spite of the tendencious diction of Moody.[3] As has been already indicated, a great deal more than "foundations of no very early date" are still in existence, and it is clear that the discoveries of 1845, even if they were made on the right site ("the apex," where indeed the S.E. tower pier stands to within 6 ins. of the surface), were of a very superficial character. Since that date the building has apparently not been disturbed at all, except that some walls were met with accidentally by workmen during the planting of additional trees in 1897,[4] until the present excavations began in the summer of 1925. The chapel as revealed by these excavations must now be examined.

1. See below, p. 259 ff.

2. *Transactions of the British Archæological Association, 2nd Annual Congress*, 1846, p. 460. An ample proportion of the members seem to have preferred the alternative excursion to St. Cross, which included the reception of the customary dole of bread and beer.

3. *Sketches of Hants*, 1846, p. 71: *Notes and Essays relating to Hants and Wilts*, 1851, p. 137: "the foundation(s) (of this Chapel) were brought to light (discovered), ..." etc.; his lead was followed by certain 19th century guide-books.

4. The site of the South Transept.—Private information from one of the workmen employed. See further p. 285.

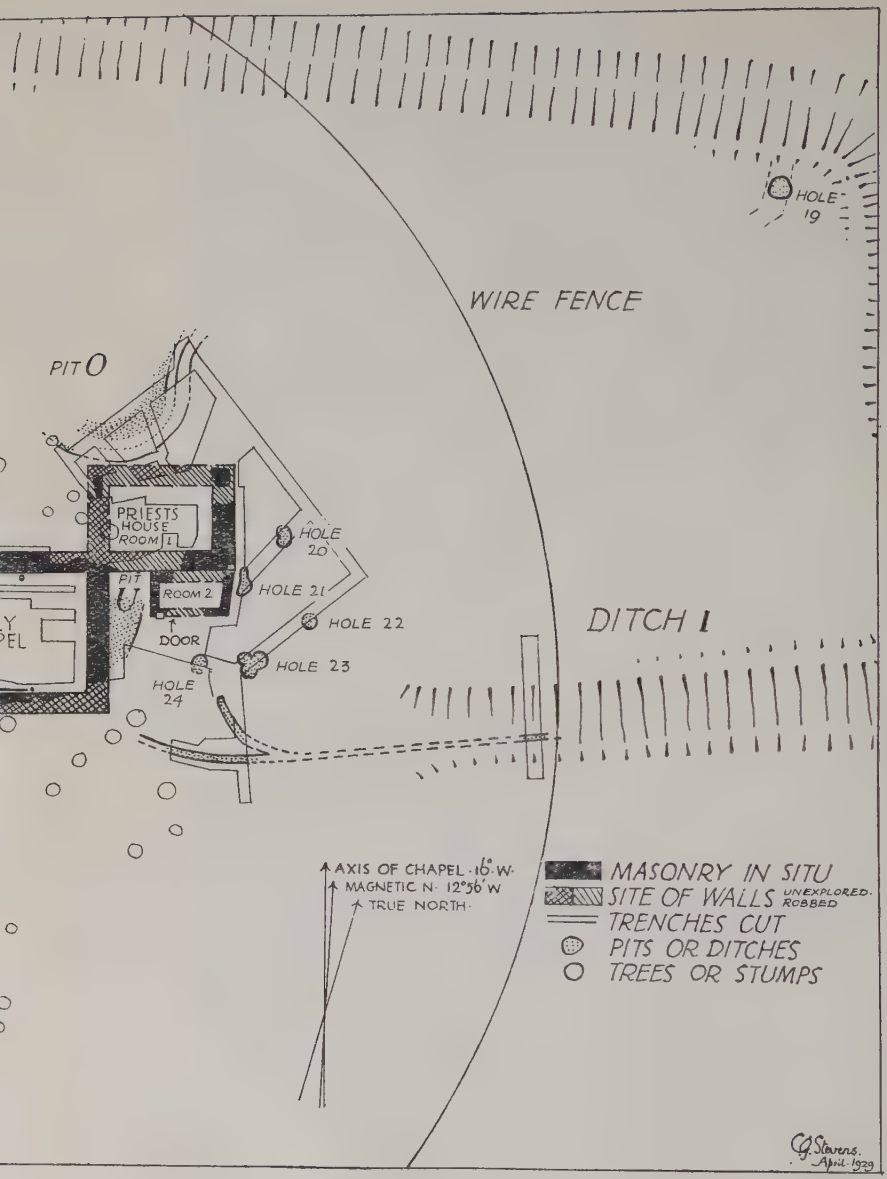
GENERAL DESCRIPTION OF THE CHAPEL

As will be seen from the plan (fig. 19), St. Catharine's Chapel was a large aisleless cruciform building consisting structurally of three parts. One, made up of the nave, crossing, north and south transepts, and western bay of the chancel, forms a single homogeneous unit with a characteristic late Norman plan, dating, as will be seen, between about 1110 and 1125. The second is the eastern part of the chancel, which opens from the first by a secondary chancel arch and was originally separated from it by a wooden screen (Plate XI, 2). This, as will be shewn, is the oldest part of the building, and formed originally a small oratory which was apparently the first Christian building on the site. Thirdly, there are to the east and north-east the scanty remains of what was probably a lodging for a hermit or for whoever had charge of the chapel. They consist of at least two rooms; one abutted on the north-east corner of the early chapel, and the other, of later date and inferior masonry, was attached to the south wall of the first and could have been little more than a porch to it. The date of these domestic buildings and even their precise extent is quite unknown, for the remaining walls are robbed to their foundations and the ground is so disturbed that the most exhaustive search for further masonry *in situ* has been fruitless.

BUILDING MATERIALS

(See pp. 220-1 for detailed description of moulded stone illustrated in fig. 22 below.)

Before examining these three sections of the building in detail it will be as well to give a general account of their construction and of the materials of which they were built. Except for the smaller of the two domestic rooms at the east end, the walls throughout are of a uniform thickness of about 3 ft. 6 ins. They are built of flint with occasional blocks of chalk or Quarr stone from the Isle of Wight—materials which were used also for angles, window jambs, and all architectural details. The central piers of the crossing are built of rubble and faced with Quarr stone throughout. Where the walls are of flint there is frequently a thick layer of cement plaster on the interior face. Two small fragments of wall plaster showing part of a design in red paint were found among the building débris. Owing to the presence of the solid chalk within a foot of the


HOLE 19
WIRE FENCE
PIT O
PRIESTS HOUSE ROOM 1
HOLE 20
PIT U
ROOM 2
HOLE 21
HOLE 22
DOOR
HOLE 23
HOLE 24
DITCH 1
AXIS OF CHAPEL · 16° W·
MAGNETIC N· 12°56' W
TRUE NORTH·
MASONRY IN SITU
SITE OF WALLS UNEXPLORED. ROBBED
TRENCHES CUT
PITS OR DITCHES
TREES OR STUMPS
G. Stevens. April 1929

old ground surface, there was no need for foundations, and in most parts of the building the walls spring straight from the natural chalk. No foundation-trench was dug in it, though where the surface of the chalk was uneven, as for example at the east end of the early chapel, a course of large unshaped chalk blocks was laid as a footing between it and the lowest courses of the flint wall. This absence of foundation-trench, as will be seen below, makes it extremely difficult to determine the course of the walls in those parts of the building (such as the west end of the nave or the domestic rooms) where they have been completely robbed away, though in the former case its exact position can fortunately be determined by other features of the stratification. The height of the walls at present *in situ* varies from 7 ft., in the case of the rubble core of the south-eastern pier of the crossing, to a single course of flints, but except in the immediate neighbourhood of the central area, they are rarely more than a foot above the old ground surface, and large sections such as the west front and the north wall of the nave have been almost totally removed.

FLOORING

(See sections, fig. 20, and Plate X.)

No remains of floor tiles were found either *in situ* or as loose fragments, with one possible exception,[1] and this almost complete absence makes it unlikely that the building ever had tiled floors, for while it is possible that the whole floor may have been taken out at the time of the destruction, yet the lack of broken fragments left behind makes this very improbable, especially when the extremely careless treatment of the slates and glazed tiles which formed the roof is considered, for numbers of these were found in fragments all over the site, though the roofs had clearly been systematically stripped for removal.

In default of tiles, the floors may have consisted of a layer of cement of a very sandy character similar in appearance to the mortar from the walls, for which the bulk of the materials was obtained from the sand and lime pits in the immediate neighbourhood of the building (see below, pp. 232-3 ff.). This cement, of which the smooth whitish surface is generally disintegrated, was laid either directly on the natural chalk or

1. The fragment in question is more probably from a glazed brick. There are however in the Winchester City Museum parts of two encaustic floor tiles which were found on the site of the chapel by Mr. Ward-Evans in 1926.

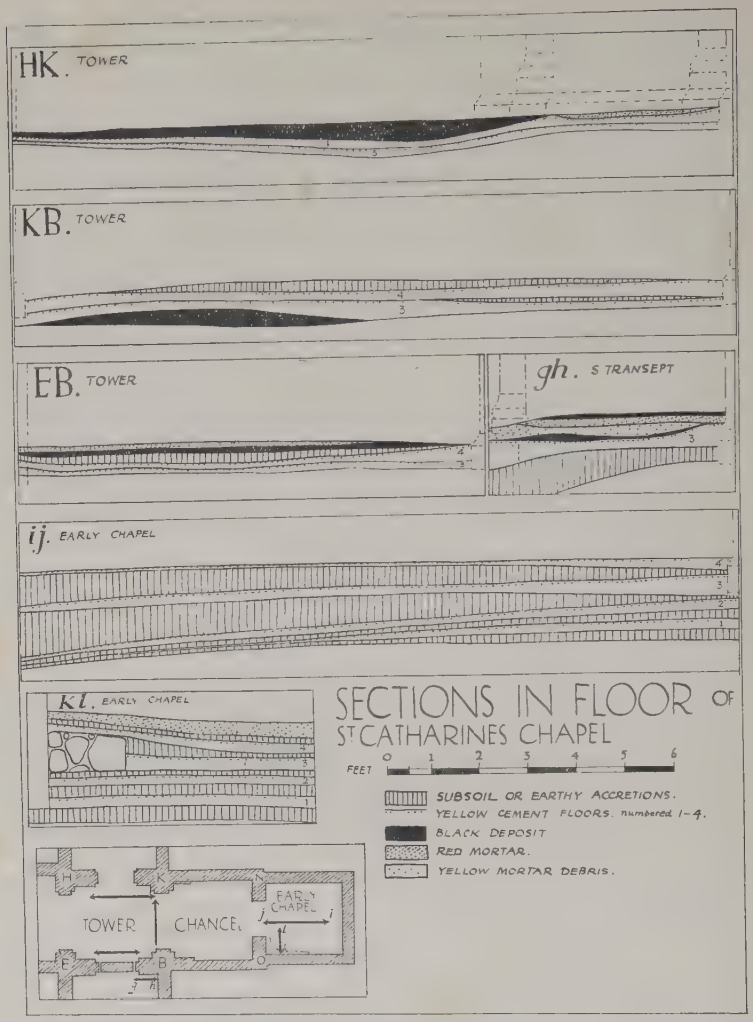


FIG. 20.
Sections in Chapel floor, with lettered key-plan.

surface-soil covering it, or in the case of superimposed floors as in the early chapel, on the dirt and refuse which had accumulated on the previous surface when in use. In the early chapel, where four successive floors were found (Plate X), and where the ground slopes naturally towards the east end, they were

separated by a make-up of humus designed to counteract the downward slope. But as the successive re-floorings and patchings in the eastern part of the building indicate, the disintegration of the earlier surfaces and sinkage of the make-up between them rendered this attempt at levelling largely nugatory, and also had the effect of making the floor extremely uneven. It is of course possible that the cement may have carried or been intended to carry wooden floors, but all trace of such woodwork if it existed has disappeared.

In the early chapel, as has been indicated, there are four floors, numbered 1 - 4 in fig. 20, sections i - j and k - l. The first is the original floor of the building and was found in a ruinous condition. It is laid on the old surface-soil above the natural chalk. Separated from it by a band of make-up is the second floor, which is also confined to the early chapel and has a hard yellow surface. The third floor, seen in all the sections in fig. 20, is contemporary with the building of the later chapel, and was continued over the earlier surfaces in the structure already existing, to avoid a step down at the east end, for owing to the slope of the ground the flooring of the latter was at a lower level. Unlike the earlier floors, it was laid almost horizontal, and the make-up below it is therefore much thicker at the east than at the west end of the earlier building (see section i - j). Elsewhere this floor is of course the first, and in the nave and transepts remained the only floor until the 16th century. However, under the tower and from the crossing eastwards there was a fourth floor (see sections H K, K B, E B, as well as i - j and k - l) : it consisted of rather looser cement, and represents a renewed attempt to level up the eastern part of the building, being absent west of the crossing and in the transepts. The south transept, however, was re-floored with a red mortar, laid over the black deposit and mortar débris due to the main destruction, at the time of its secondary occupation for secular purposes towards the middle of the 16th century (see section g - h), and patches of this were also found in the crossing (see sections H K, E B) which are clearly connected with the same event (see pp. 214-5 below), as one (in section E B) overlies the same black deposit of destruction-rubbish. The exact dates of the successive alterations are not very clear. No large areas could be examined, and in the sections which were cut in the nave, crossing, south transept, and early chapel which provided the evidence here recorded, almost no datable material was

found. The floor coming third in the early chapel and first elsewhere belongs of course to the earlier part of the 12th century when the later chapel was built.

The isolated patch of black burnt deposit seen underlying it in section K B was barren and may be disregarded. In the south transept mediæval green glazed ware and fragments of stained glass were found in the main destruction-layer (section G - H), while in the red mortar floor already mentioned were some pieces of 16th century Farnham ware, dating the secondary occupation of the transept. In the early chapel between the third and fourth floors was found a Nürnberg jetton, the date of which is discussed below (p. 244). Though it is of a type common in the latter half of the 16th and in the 17th century, the upper limit of its occurrence is apparently unknown, and therefore while its discovery in this position need cause no great surprise, it adds little or nothing to our knowledge of the date of the fourth floor.

ROOFING MATERIALS

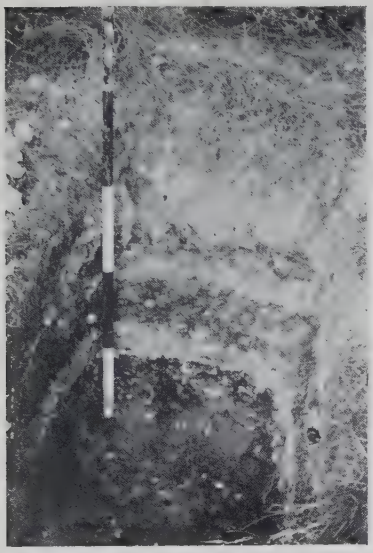
(See below, fig. 24, and detailed description pp. 224 - 6, with index letters referred to in text.)

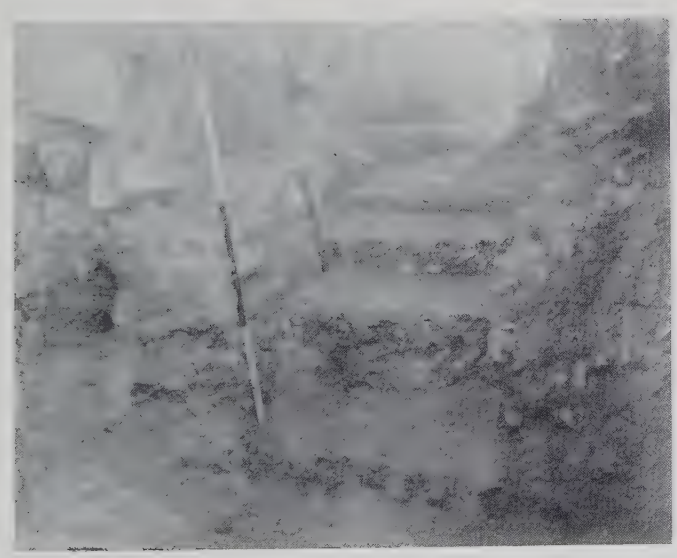
Of the roof of the building it is difficult to speak with certainty in spite of, or perhaps because of, the great variety of roofing materials with which the soil of the site is littered. These include unglazed red tiles (I), glazed tiles of many different types (A - H), which included decorated ridge tiles and finials, and were carried out in various shades of brown, yellow, and green glaze, and finally blue slate (J). A number of small pieces of sheet lead were found (K), but not more than could be accounted for by the existence of gutters and spouting of this material.

The presence of the blue slate demands further consideration. It was at first thought that it must belong to some post-mediæval building on account of the great improbability of this material being used in Hampshire in the Middle Ages, so far from any source of supply. There are apparently very few cases of the use of blue slate for roofing purposes in the Middle Ages in England outside the areas in which it occurs geologically, that is to say Cumberland and Westmorland, Wales and Devon and Cornwall, and of these cases it is generally difficult to be certain that blue slate and not some limestone such as was used habitually

PLATE X.

ST. CATHARINE'S CHAPEL.





Floor levels in early Chapel:

1, near E. end, seen from East:

2, near Archway opening from Chancel, seen from South.

in the Cotswold region and Northamptonshire is intended by the word "sclat" and its Latin equivalent "ardesia" in the documents.

One or two examples may be quoted to illustrate the difficulty. When in 1325 the gaol at the Northgate of Oxford was enlarged and repaired, and we read of the use of "sclat et crestes,"[1] the meaning is almost certainly a roof of Cotswold limestone slates, still the normal material in the north Oxfordshire villages, with ornamented ridge tiles or "crestes" of earthenware. But when in 1430 the cloister of Bermondsey Abbey was re-roofed by its Abbot, "cum petra vocata sclat,"[2] it seems impossible to determine whether this was a blue slate or a limestone. A French example is clearer. The Abbot of Cluny a little after the middle of the 15th century re-roofed part of his church with wood and slate from Brittany brought by water.[3] It is just possible that the two last instances may be connected, for in 1458 envoys from Cluny were in England and may have seen the new slate roof of the cloister at Bermondsey. The Breton slate which is in common use in north-western France is a true slate allied to the Cornish and Welsh types. Other examples could no doubt be found for its use in France outside the immediate neighbourhood of its occurrence.

But in England, St. Catharine's Chapel appears to be one of the few instances in which certainty is beyond question of the mediæval use of blue slate outside the limits of its geological distribution. This conclusion is based on the following considerations :—

In the first place the slate has been found stratified in the building in positions which it could not have reached unless it is of mediæval date, for example, piled in heaps on the cement floor against the piers of the crossing under all the débris, many feet thick, which fell from the walls after the roof had been removed. Again, very large quantities of it are found all over

1. *Munimenta Civitatis Oxonie* (Oxford Historical Society), p. 262 : "Item pro sclat et crestes pro domo mulierum et gaole porte borealis Oxon—xiv*d*."

2. Annals of Bermondsey (*Annales Monastici*. ed. Luard, III, p. 487), 1430 : "Eodem anno Thomas Thetford abbas de Bermundeseye de novo cooperiri fecit claustrum cum petra vocata sclat."

3. *Bibliotheca Cluniacensis* (ed. Marrier et Duchesne) : Abbot Jean de Bourbon (Abbot, 1458). "Item reparari fecit et de novo cooperiri tam in lignis quam in tegulis ardesiae ex Britannia per flumen Ligerim (Loire) usque ad portum de Digoyn traductis quattuor maiora pinacula sacri monasterii Cluniacensis." (The last two instances are due to the kindness of Miss Rose Graham, F.S.A.).

the chapel site. Heaps had been made outside the west front, along the north wall of the nave, and, as already mentioned, against the central piers. But as one recedes from the neighbourhood of the chapel, the soil becomes much freer of slate fragments, until outside the line of the present fence its occurrence is comparatively rare. It is obviously related, that is to say, to a building occupying the chapel site, and we have already seen reason to believe that after the destruction of the south transept, which there are grounds for placing before 1565, no such building existed. We are left therefore with the conclusion that the slate must have been used on the chapel itself, though it is impossible to suggest a date. Thirdly, the slate comes almost certainly from the North Devon area, and is not of a type which has been mined for export for at least the last hundred and fifty years.[1] We know that there was no building on the Hill after the destruction of the chapel, and it must therefore go back to the time of the chapel itself. It is worth noting that West country slates, and especially those of Cornwall, were much fancied from the 16th century onwards, and are known to have been exported from the 17th. The earliest record is that of Norden, who, writing in 1584, describes Menheniot slate as the best in Cornwall. In 1602 Carew says Cornish roofing slate "generally carrieth so good regard as (besides the supplie for home provision) great store is yeerely conveied by shipping both to other parts of the Realme, and also beyond the Seas, into Britaine and Netherland."[2] As late as 1758 Borlase, writing of Delabole slate, says that it is perhaps the finest in the world.[3] But its use in the chapel is apparently earlier than any literary record.

The slate fragments are found in such large quantities in every part of the chapel as to make it probable that a great part of the building was roofed with it at the time of its destruction. This was almost certainly the case with the nave and probably with the north transept. But the presence of both plain red tiles and also glazed tiles of several different types which belong to the 14th and 15th centuries but cannot apparently be dated more accurately within those limits, shows that certain parts at least were roofed at some time in a different way. Though the glazed tiles were found all over the site, they were present

1. Specimens were submitted to Dr. F. J. North, Keeper of the Dept. of Geology in the National Museum of Wales, and to Mr. J. A. Howe of the Geological Survey and Museum, Jermyn St., who reported in this sense.
2. Carew, *Survey of Cornwall* (1602), p. 6.
3. All three authorities quoted in *V.C.H. Cornwall* I, p. 519.

in the greatest quantities in the chancel, and a heap of them, together with fragments of leading which was found against the outside of the south wall near the junction of the earlier and later buildings, rather suggests that the chancel was covered with them at the time of the destruction. Plain red tiles were prevalent in the south transept and were also stacked at various points along the south wall of the nave, and it is possible though not certain that they were used in the south transept either before or after the latter was secularized on the destruction of the rest of the building. The domestic rooms at the east end seem to have been covered with tiles of a very glossy yellow orange glaze, a number of which were found in their neighbourhood and nowhere else on the site.

Though it must be remembered that these conclusions are necessarily tentative owing to the fact that the bulk of the roofing materials were carted away at the time of the destruction, yet sufficient was left behind to show that whatever the precise arrangement, the building must have presented a striking appearance from the variegated colours of the roof. The blue slates of the nave, red tiles of the south transept, and bright green, brown and orange glazes at the east end, the last possibly set out in geometrical patterns, would have made a remarkable colour-scheme above the grey flint and chalk walls of the chapel. The idea invites comparison with many existing glazed-tile roofs of churches in Austria and South Germany.

DOORS AND WINDOWS

The walls are so badly robbed almost everywhere that the positions of doors and windows must remain obscure. Only one window opening is left, and from this the stone sill and jambs have been taken: it is in the middle of the west wall of the south transept (see p. 216, fig. 21, and Plate XIV, 2). The general appearance of the plan would indicate a single window of this width in each wall of the transepts and one in each side of the western bay of the chancel, with two or three in each side of the nave. About the early chapel and the west front nothing can be said. There was presumably one west doorway, but there appears to have been no south door in the nave, as was usual in churches of this type, unless the column base in the wall 5 ft. west of the crossing represents an original doorway subsequently built up (see p. 217 and Plate XV, 2). If so, it is in an unusual

position. If no south door existed, its absence would not be very surprising for the main approach from the direction of Winchester would be from the north, and the complete removal of the wall of the nave on this side deprives us of information as to a possible north door. There is also no trace of the usual " priest's door " on the south side of the chancel, but its absence may be accounted for by the presence of the domestic buildings to the north-east of the structure. So far as the trees have permitted examination, however, there appears to be no door on the north side either. The remains in this area are in fact in too fragmentary a state for it to be clear what direct communication, if any, existed between the chancel and the domestic buildings. There is, however, a door jamb still *in situ* in the south wall of the smaller domestic room.

Small and very corroded fragments of stained glass were found at various points: in the south transept and outside the north and south and east walls of the chancel, and there were also a number of fragments of leading for glass. One, which had held diamond-shaped quarries, was outside the south wall of the chancel.

STRUCTURAL DESCRIPTION

(For explanatory notes on the Elevations, fig. 21, see below, pp. 219-20.)

THE EARLY CHAPEL

The eastern part of the chancel is, as has been indicated above, structurally the oldest part of the building, and the description should therefore begin at the east end. The internal dimensions of the early chapel are 19 feet from east to west by 18 feet from north to south, and its original floor level was a little over a foot lower than that of the later building, whose builders, as it occupied the very top of the Hill, found it convenient not to cut away the natural chalk over the whole of its floor space to the level of the floor of the earlier building, but maintained a uniform surface at the higher level throughout. The chronological relationship of the two parts is thus clear, for not only was the southern pier of the later chancel arch built actually over the original floor of the early chapel, but that original floor had itself been raised a few inches and a fresh surface made before the later chapel was built. After the later chapel was built its floor was carried straight through over the

two floors in the early chapel to avoid the necessity of a step down at the east end, and at a later date still the level was again raised and a fourth floor was added, probably because the floor of the early chapel had a natural tendency to sink owing to the gradual disintegration of the earlier surfaces beneath, and the consolidation of the dirt and débris which had accumulated on them when in use.

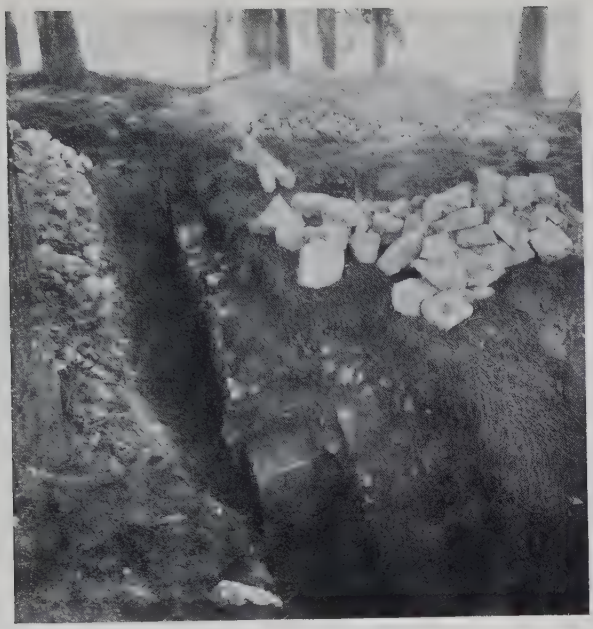
Owing to the gradual slope of the ground from the centre of the mound to the east, and to the presence of trees at the north-east and south-east angles and on the greater part of the south wall, the walls of the early chapel, though they are built about a foot lower than those of the later chapel, are very imperfectly preserved. The east wall is nowhere higher than two courses of flints over a footing of heavy unshaped chalk blocks. The south (Plate XI, 1) starts with six courses of flints at the junction with the later chapel, but drops almost immediately to two, while the north wall, which begins at the junction with eight courses, is almost entirely destroyed by the trees for several feet from the north-east corner. A remarkable fact about the east wall is that its footing of chalk blocks is built partly over one of the natural swallow-holes in the chalk which are common on the top of the hill and whose contents of sand provided material for the mortar used by the builders. In this case the swallow-hole seems to have been partly cleared of sand by a pit (Pit U : see p. 233 and fig. 21) dug outside the east wall and refilled with earth and rubbish after the demolition of the chapel, for in the filling at the bottom of the pit was a number of chalk blocks, one of them squared, which can only have come from the building after it was destroyed. It is, moreover, inconceivable that a pit more than 8 feet deep can have been dug against and partly underneath the east wall when it was still standing to any considerable height, and leaving it supported only by loose sand without causing a collapse. It is perhaps reasonable to suggest that the occasion for digging sand from a pit in this position may have been the need for mortar for the re-pointing and re-conditioning of the south transept for use after the rest of the building was demolished in 1538-40. That is at any rate the only occasion that we know of when building of any kind which would have required sand for the mortar took place on the Hill after the main destruction of the chapel, and no other explanation for the extraordinary position of the pit is easy to put forward.

The inner surface of the walls where it is preserved above the level of the original floor is almost everywhere covered with a thick layer of plaster and, as already mentioned, fragments of fresco have been found though not *in situ*. On the south side, and in the angle formed by the south pier of the chancel arch, there is further a revetment of roughly-shaped chalk blocks, some 20 inches wide and 10 inches high, set against the inside face of the wall (see section k - l in fig. 20 and Plate XI, 2). These blocks are not part of the original construction, as they rest upon the second of the four floors, whose significance is discussed above. The third floor runs against the face of the revetment, leaving about the upper 5 inches exposed, while the fourth floor covers it entirely. The structure therefore dates from the third period, which is that of the building of the later chapel, and as it is built against the east side of the chancel arch of that period, it must be dated with but rather after it. It was probably intended to serve as the base for some construction, and its position suggests that it carried the tall backs of some kind of choir stalls or heavy panelling. No such feature was noticed on the north side, but it may easily have been removed when the fourth floor, which covers it on the south, was laid down. In the middle of the north side, however, embedded in mortar against the inner face of the wall at the level of the third floor, was found a worked stone of hexagonal section, evidently intended as a bracket or support for something which has disappeared, possibly wooden flooring.

THE DOMESTIC ROOMS

(Priest's House or Hermit's Dwelling)

The north wall of the early chapel, instead of coming to an end at its junction with the east wall, was found to continue in a very fragmentary state some 18 feet towards the east, at which point it makes a right-angle turn towards the north, the lowest corner-stone being still *in situ*, but after about 10 feet it breaks off, and having no foundation-trench its further course could not be traced with certainty. Apart from one isolated fragment of its core still *in situ* a few feet farther on, the most exhaustive search failed to find any trace of its continuing in any direction. The presence of a large and very deep sand-pit (Pit O : see p. 233 below) in the chalk immediately north and north-west of the point where the wall disappears makes it



1. S. Wall of Chancel, seen from East, shewing offset at junction with S. Wall of early Chapel.
2. S. Pier of Archway opening from Chancel into early Chapel, seen from North, shewing slot in centre for wooden screen. The rough masonry added later, perhaps to support stalls, is visible on the left.

unlikely that it could have been run much further in that direction, for the pit was certainly open in the Middle Ages, as its contents shewed, a flight of steps having been roughly cut in its south-east side to provide access to the sand at the bottom, though it is now filled in level with the ground around it with earth and rubbish. To the east the ground is comparatively clean and undisturbed, and it seems fairly certain that the wall turned to the west about the point where its last fragment is found and skirted the southern edge of the sand-pit. The whole of its assumed course on this line is littered with loose flints and mortar débris as if a wall of some sort had been demolished, and a mass of mortared flints probably represents the remains of its core some 10 feet north of the north-east angle of the chapel. If the east wall of the chapel had been prolonged north across the angle in the same way as the north wall was prolonged east, it would meet this mass of core, and so produce the west side of a rectangular room with dimensions of 10 by 16 feet. Unfortunately, however, a group of trees stands immediately north of the corner of the chapel, so that its outer face cannot be examined to see whether the east wall was continued in this way, and it is just possible that the west wall of the room lay as much as 6 feet farther west, and still under the trees. Further west than this it cannot be, for the rest of the face of the north wall of the early chapel has been cleared and shows no sign of its abutment, and it was not found in a diagonal trench outside the north wall of the later chancel. We are therefore justified in using the evidence, fragmentary as it is, to indicate a room of approximately the above dimensions attached to the north-east angle of the early chapel.

As to the date of the room, there is no stratification in the foot or so of soil which lies in it over the natural chalk to give any assistance, and unfortunately roots from the trees have destroyed the eastward continuation of the north wall of the early chapel so completely at the crucial point that it is impossible to say whether it is of the same build as the early chapel or a later addition. The similarity of the alignment, the width, and the masonry where it is preserved at the eastern angle would certainly suggest contemporaneity, but it would be rash to speak definitely on so doubtful a point.

It must in any case be earlier than the small room or porch with irregular angles, and main walls only 18 inches thick, which is attached to the south side of it. This room, with

internal dimensions only 10 ft. by 3 ft. 6 ins., and a doorway with one grooved corner-stone in place at its south-west angle, is built against and not bonded into the larger room, and it has its own north wall running alongside the wall of the larger room, and partly covering the eastern corner-stone of the latter. Its walls only stood one or two courses high and were built of flint with wall-plaster on the inner surface, and it seems to have been floored with yellow cement, now very much disintegrated. The roof, as already mentioned, must have been covered with very glossy and foamy orange-yellow glazed tiles, many fragments of which were found round it and nowhere else on the site.

Before passing to the later chapel, there are two points in connection with these rooms which should be emphasized. Firstly, there can be no question that they are of a domestic and not a religious character. For the latter indeed their plan would be highly anomalous. Moreover, one of the most remarkable features of the whole site is the enormous quantity of broken mediæval pottery which it has produced,[1] and it was quite clear, even before these rooms were found, that it could not be accounted for by the casual droppings of picnic-parties and pilgrims. Now in these rooms and their immediate neighbourhood the quantity of broken cooking pots, domestic utensils, and glazed pitchers, is far greater than in any other part of the site, and it is impossible to resist the conclusion that they indicate the permanent habitation, if not of a priest, of a sexton or caretaker, or very possibly (as so often in chapels of this sort) of some anchorite or hermit, who took charge of the building on behalf of the priest of Chilcombe. In the space between the small room and the east wall of the chapel was a mass of mediæval pottery in which were the most complete specimens of glazed pitchers found anywhere on the site. It is clear that this corner must have been used as the rubbish-heap of a permanent dwelling, and can only be connected with these two rooms. Secondly, it will have been clear to anyone reading this account that their plan as shown does not necessarily represent the whole of the original building. The surviving walls are all robbed down to within a few inches of their base, and since they have no foundations, nothing but the disintegration of a little mortar is needed to make them

1. Parts of at least 600 different vessels have been found : for details see pp. 234-42 and figs. 26-8 below.

indistinguishable from the surrounding soil, which likewise consists largely of loose flints, broken mortar and other building débris. It must not therefore be thought that the plan is necessarily a final and complete one. For while on every side, except the west where the trees are an obstacle, the ground has been extensively trenched without the discovery of any structural remains *in situ*, it would not be safe to assume from this that none certainly existed. This caution will cause no surprise to those who have experience of tracing destroyed flint walls on a chalk subsoil where no foundation-trench was dug.

The Domestic Rooms: Note on comparative material.[1]

The domestic rooms may certainly be presumed to have belonged to a chaplain's dwelling, though the position at the north-east corner of the chancel is unusual. Rooms for chantry-priests or sometimes anchorites are common above the side-chapels or sacristies of parish churches (*e.g.* at St. Mary's, Beverley, Yorks, or Long Sutton, Lincs.), but a regular dwelling-house abutting on a church is more anomalous: *e.g.* at Ravenstonedale, Westmorland, where in the north-east of the churchyard a sizable house has lately been unearthed which seems to have adjoined the old church, its occupants being the two or three canons of Walton who habitually resided there.

Save in such cases as that of St. Catharine's Chapel, Milton Abbas (see below, p. 251), which was served from the abbey close by below the hill, every isolated chapel would naturally have some residence on the spot for a chaplain or warden, either standing near, or forming a single building with it; St. Mary's Chapel, Jesmond, near Newcastle, had one on its north side: at Terrington St. John's, near King's Lynn, it was between the south-west corner of the nave and the tower, and large enough for more than one chaplain, while all the western portion of the chapel (now ruined) at Rowland's Gill, near Newcastle, was so used, and had two storeys. Thus the precise location of such domestic rooms clearly varied, and the position in the present case need cause no surprise: the 14th century chapel at Wykeham near Spalding itself formed part of a house, which was used as a grange of Spalding Priory.

1. The substance of this note has been kindly provided by Prof. A. Hamilton Thompson.

THE LATER CHAPEL

Note on its addition to the earlier building.[1]

As has been seen, the priority of the early chapel is clear from the stratification, and its enlargement by the addition of a structure abutting on to its western end is a case of one among several mediæval devices for enlarging sacred buildings. At St. Woolos, Newport, Mon., the old nave was made to form the narthex of the later church, while at Llantwit Major, Glamorgan, two distinct churches were formed by adding a large annexe to the original structure. Sometimes an old building was completely enclosed within a new one and then destroyed to its foundations, as at Finchale Priory, Co. Durham,[2] where St. John the Baptist's Chapel was enclosed, along with the tomb of St. Godric which it contained, in the 13th century aisled choir, occupying the space between the ritual choir and the high altar: it was then demolished, while the tomb was carefully preserved. The practice followed in the present instance may be compared with the case of the church at Jarrow, Co. Durham, where a large nave (now entirely rebuilt) was added at the west end of the early (Saxon) church, with its tower porch: but as the latter was far from being a simple small oratory like our early chapel, and had a regular nave and chancel, we find its nave becoming the chancel of the new church formed by the additional building, while what had been its chancel was destroyed probably at the same time, and is now fragmentary.

The Chancel.

As has been already indicated, the early chapel opens westward into the later chancel through an archway of the later period flanked on its western side by a pair of engaged columns (Plate XI, 2) whose bases are still *in situ*, and are of the same type as those of the piers of the crossing, to be described below.

That on the north has still one drum of the column shaft remaining, and the pier is preserved for one course above its bevelled plinth, but the western bevelled corner-stone has been replaced by a square unbevelled stone at some unknown date. The southern pier is in much the same state of preservation but the base alone of the column is preserved. The archway,

1. Acknowledgement for the material of this note also is due to Prof. Hamilton Thompson.

2. Peers in *Archæologia Æliana*, ser. 4, vol. IV, p. 193 ff.

PLATE XII
ST. CATHARINE'S CHAPEL.

1. N.E Tower Pier, seen from South.
2. S.E. Tower Pier, seen from North.

which is 9 feet wide, was originally blocked by a wooden screen, the groove for the end of which is to be seen on the southern pier. The western bay is 2 feet wider than the early chapel, and there is accordingly an offset of a foot on each side where the junction of the walls comes (Plate XI, 1). The eastern 10 feet of the southern wall were exposed and were standing to an average height of 3 feet or about seven courses of flint: the inner face was covered with a layer of wall plaster. On the north side a smaller distance only could be cleared owing to the proximity of trees; a length of 6 feet of the external face was, however, found standing to a height of eight courses of flints.

The Crossing.

The site of the crossing lies under the highest part of the mound, and the original floor level is buried under more than 10 feet of fallen masonry and earth. It was not found practicable to clear the whole of this area during the excavations, but the piers were fully examined and several sections were taken in the floors between them. Each pier consists of two members, a short one carrying the arches over the chancel and nave, and a longer one at right angles to it carrying the transept arches. Each of these members is flanked by a pair of columns, whose bases rest on a bevelled plinth. The bases of nine and perhaps ten of the sixteen original columns are still *in situ*; of the remainder, all four on the north-western pier and two on the transept member of the north-east pier have been removed, and that on the south side of the transept member of the south-western pier has not been examined. The east and west arches of the crossing, leading into the chancel and nave, are 14 feet wide, the north and south arches leading into the transepts only $9\frac{1}{2}$, the difference being due to the greater length of the transept member of each pier. A curious feature is that the transept arches are set asymmetrically, the western members being in each case 7 feet in length while the eastern members are only 6 feet long.

The north-east pier (Plates XII, 1 and XIII, 3) is preserved in the eastern part of the transept member to a maximum height of 3 feet or five courses of ashlar above the bevelled plinth, and the western column base of the shorter member still retains its lowest drum, but the rest of the member is robbed to a single course above the plinth, and only the base of the eastern column

remains. The end of the transept member is robbed to the plinth itself and both bases have gone.

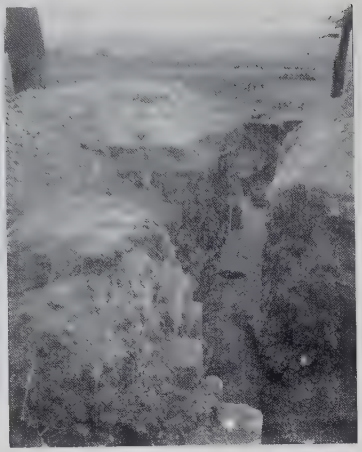
The core of the south-eastern pier (Plates XII, 2 and XIII, 1) is preserved to a maximum height of 7 feet, and seven courses of the ashlar facing are standing in the corner facing the transept more than 5 feet above the original floor. The southern column of the transept member retains four drums above its base to a height of 5 feet from the bevelled plinth, nearly 6 from the floor level. The shorter member is less well preserved, but even here four courses of ashlar are in position, and the western column retains two drums and the eastern one above its base. The northern column of the transept member, however, has only its base left, though the masonry behind it is four courses above the plinth. The good preservation of this pier is no doubt due to the fact that the south transept was retained in use after the destruction of the rest of the building. Between it and the south-west pier (Plate XIII, 2) a blocking wall was then built of inferior masonry to close the transept arch and cut off that part of the chapel from the rest. In this wall a red mortar was employed quite unlike that in any other part of the building. The south-east and south-west piers were re-pointed with it at the same time, and on the transept member of the south-east pier there is a large patch of it covering an area of decay in the masonry.

The south-west pier is in a more fragmentary state. The ashlar stands nowhere more than three courses above the plinth, and over a great part of the transept member only one course remains. The bases, except that on the north side of the transept, have lost all their drums, and the latter retains only part of its lowest one. The side of this pier facing the transept was not examined.

The north-west pier has been entirely robbed of its ashlar facing, but sufficient of its rubble core remains to indicate its position and show that it resembled the other three in architectural features.

The stratification in the floor of the crossing has already been described, and allusion made to the blackened destruction-layer overlying most of the flooring, and to the patches of red mortar partly overlying it in their turn. The latter are of the same material not only as the post-destruction floor in the south transept, but also as the mortar used for the contemporary reconditioning of the masonry there, including the wall blocking

PLATE XIII.
ST. CATHARINE'S CHAPEL.



1. E. Pier of S. Transept Arch, S. side. The later blocking wall is seen on the left.
2. Looking West from S.E. Tower Piers across S. Transept entrance blocked by later wall.
3. N.E. Tower Pier, seen from West.

its arch: it was along the latter that these patches of mortar in the crossing were most frequent, and where they are not mere casual droppings they clearly represent the builders' piles.

Above comes the wreckage of the demolition: miscellaneous rubbish, some of it burnt, stacks of abandoned slates against the walls, and over all the 6 to 8 feet of mortar, broken masonry, and flint, which at its highest point form the bulk of the mound that has ever since marked the spot.

The Transepts.

The dimensions of the transepts are not exactly similar, the internal measurements of the south being 25 ft. 6 ins. north to south by 22 ft. east to west, while the north has the same east to west measurements, but is 30 ft. 6 ins. from north to south. The difference of 5 feet may partly be explained by the asymmetrical position of the north wall of the nave, to be discussed below, one effect of which would be to make the external length of the west wall of the north transept shorter than that of the south unless the internal measurement was made longer. As it is, while the north transept is 5 feet longer internally, the external measurements of the two west walls are within 18 inches of one another.

The north transept is much less well preserved than the south. Of its east wall practically the whole length has been exposed and the face is nowhere preserved to a height of more than four courses of flints. The northern half is only two courses high and the north-east angle has been robbed of its ashlar corner blocks. The north wall is only traceable with difficulty. Some 5 feet adjoining each angle has disappeared altogether and the remaining section is represented only by a single course of flints, except for a length of some 4 feet where two courses remain. The northern corner of the west wall is also only marked by the core, and for 4 feet more by a single course of flints, but it then mounts gradually to six courses at a point 3 feet from its junction with the north wall of the nave. Most unfortunately, however, a tree here makes the angle unapproachable by the spade, and the valuable evidence for the exact line of the destroyed wall of the nave which that junction would provide cannot be used. The problem of this wall will be discussed further in connection with the nave.

Of the east wall of the south transept only the southern half could be examined because of a tree growing on the wall itself.

The wall dropped quickly from six courses high under the tree to two courses for the greater part of the distance to the south-east corner which is the only one to retain a bevelled corner-stone *in situ*. The south wall (Plate XIV, 1) is nowhere more than four courses high and drops to two at both ends. A large tree grows almost directly over the south-west corner and has seriously disintegrated the remaining courses of the wall. The lowest course is, however, practically intact, though the bevelled corner-stone has been removed. The west wall (Plate XIV, 2) is the best preserved of the whole building. Except where it is broken by the roots of the tree just mentioned, it is never less than five courses of flints in height, and rises for the last 4 feet before joining the nave to no less than 11, or 4 feet above the old ground surface. In the middle of this side there is a straight-sided drop of four courses in the flint masonry, with a width of a little over 6 feet. Its bottom is also level at a height of 2 feet from the old ground surface. It represents without doubt the site of the lower part of a window from which the ashlar facings have been removed. Its original width would have been probably about 4 ft. 6 ins. and its sill some 3 feet from the ground. Since none of the facing stones remain it is not possible to say whether it was of the same date as the building or a later insertion, but a window of some kind, though not necessarily one of this size, would be normal in this position from the beginning. In the corner of the wall nearest the junction with the nave there are several blocks of ashlar and squared chalk among the flint masonry to add strength to the angle. The interesting stratification revealed by section g - h in the north-east corner of this transept (fig. 20) has already been recorded (pp. 201-2): it makes it clear that the south transept was not merely spared from the general destruction, but was deliberately re-floored and generally repaired to fit it for a lease of life which turned out for some reason to be unexpectedly short.

The Nave.

The south wall of the nave, the only part which is left in any degree of preservation, runs westwards from the south transept for 52 feet. For the first 5 feet seven courses are preserved to a height of about 3 feet. The wall then breaks down very quickly, and for some 6 feet is completely absent. It soon begins again, however, and three courses are preserved

PLATE XIV.
ST. CATHARINE'S CHAPEL.

1. S. Wall of S. Transept, seen from East.
2. W. Wall of S. Transept, seen from North. The gap marking probable position of window is just seen behind the measuring pole.

PLATE XV.
ST. CATHARINE'S CHAPEL.

1. Broken end of S. Nave Wall, seen from West.
2. Column-base built into S. Nave Wall, seen from S.E.: the gap perhaps marking site of door is visible on the left.

for the rest of its length, and four for about 8 feet, though three or four tree stumps remain on the line of the wall. Wherever it is preserved high enough, the inner face is covered with wall plaster, and in the corner by the south transept there are a number of large stone blocks among the flints similar to those in the west wall of the south transept. At a height of a foot from the old surface at a point 5 feet west of the south transept angle there is built into the outer face of the wall a column base for an engaged column of exactly similar type to those in the crossing (Plate XV, 2). It serves no purpose where it is, as it is built round with the ordinary flint masonry of the wall, and only two explanations of it are possible. One alternative is to say that it is not *in situ* at all, but that all this piece of wall has been rebuilt and this base, of 12th century work, has been re-used fortuitously at this point. But on the other hand the fact that the wall completely disappears for about 6 feet a little to the west of this base may not be wholly without significance, for both the presence of the base and the absence of the wall may be due to the same cause—a door. It is clear that the base could not have formed part of a door in the later period of the chapel's history, for the wall continues at least 3 feet west of it, but it may be a ghost of a door of the original building which for some reason was moved a few feet further west at a later date. The ashlar facings of the later version of the door may have been completely removed, leaving as the only signs of its existence a break in the wall and the built-up column base of its predecessor. But it is impossible to speak with certainty.

The 12th century cement floor was in poor condition but recognizable throughout: it was in places covered with stacked slates and tiles, in addition to other débris.

The south wall ends in a broken mass of core 52 ft. west of the crossing (Plate XV, 1), and the most extensive search has failed to reveal any masonry beyond this point. But there can be no doubt that the west front lay only 7 feet further west. The whole of it has been removed, and its plan is not recoverable, but its precise position can be determined by the state of the surrounding soil. The cement floor of the nave, though much disintegrated, is preserved up to a definite line 4 feet beyond the broken end of the wall. Beyond this line the ground is disturbed for 3 feet, representing the thickness of the vanished west wall, and outside this begin the heaps of slate which extend all along the west and north of the building. The

slates were evidently stacked, here as elsewhere, against the outside of the wall, and after the majority had been carted away the rest, mostly broken, were left, even when the walls themselves were grubbed up, as was the case with this one. Hence the line of the edge of the slate heaps still keeps approximately to the outer line of the walls where, as in this case, the latter have been entirely removed, and the space between this line at the west end and the line of the western edge of the cement floor provides the exact site of the west wall without any reasonable doubt. This gives the nave an external length of 59 feet.

Like the west wall, the north wall of the nave has also been completely grubbed up. But the same means are available to determine its position. Three sections taken across its site all showed the same result, which was at first sight unexpected, namely, that the north wall did not spring directly from the back of the transept arm of the north-west pier, but from a point nearly 4 feet to the north, and was therefore out of symmetry with the south wall. But there are two factors which confirm the evidence of the ground. In the first place, it provides an explanation for the fact that the internal length of the north transept is 5 feet greater than that of the south. For if the north wall of the nave lay, as the slate-heaps and the floor-line shew, 4 feet north of its expected alignment, there would be only about 18 ins. difference in the external measurements of the two west walls of the transepts, and the eccentric axis of the nave would thus be practically masked from the outside of the building. It suggests in fact very forcibly not only that the nave and transepts are of homogeneous build, but that building began on the west end of the nave simultaneously with the tower piers. Had it begun only at the east end, as at Romsey or St. Cross, the extra length of the north transept would not have been made to fit an eccentric nave which *ex hypothesi* was not yet built. But the second argument is still more decisive. In one of the sections cut across the supposed line only about 10 feet west of the junction with the north transept, a line of flints 5 feet in length was found exactly on the required alignment with the slate fragments running up to but not beyond it. Though so short a length of one course only of flints remained and the core and inner face of the wall had been entirely removed, this is clearly the sole remaining fragment of the north wall of the nave; if it were possible to cut down the tree and examine the abutment on the north transept, it would

no doubt be found to confirm the same alignment. The breadth of the nave is thus 28 ft. externally, and internally 22 ft.

DESCRIPTION OF ELEVATIONS (fig. 21)

As a concise summary of the foregoing account of the chapel, it may be well to supply a guide to the accompanying stone-for-stone elevations.

ABEF, extending along the top of the sheet from left to right, gives the complete internal elevation of the south walls of the chancel and nave. The débris from the domestic rooms is seen outside the east end, and the half-dug swallow-hole (Pit U) underlying the east wall of the early chapel. The higher footing-level marks the beginning of the later building at Pier O, the west elevation of which is appended. On the other side of the short unexcavated portion of the later chancel, the crossing is reached with Piers B and E (the southern supports of the tower), with the secondary wall built with red mortar blocking the transept archway between them. The remains of the nave wall, cut by the possible south doorway gap, complete the elevation, and just beyond its broken end is shewn the site of the vanished west wall.

Directly below this on the right of the sheet, K L M is the internal elevation of the north chancel wall, from Pier K, the north-west pier of the crossing, through Pier N, the west and east elevations of which are appended: here, with the change in footing-level, the early chapel is reached, and beyond its east wall is the remnant of the domestic rooms.

Below this again, the extreme right of the third row of elevations is occupied by B A, which shews the outside of the south chancel wall, answering to the left-hand portion of ABEF at the top: at the point corresponding to Pier O there the joint and change of footing-level is seen between the earlier and later masonry. On the left of this appear other elevations of the central piers K, B, and E, and of the uncovered interior portion of the south transept east wall adjoining Pier B.

Returning now to the left-hand side of the sheet, immediately below A B E F are seen the sections a - b, c - d, and e - f cut to locate the missing north nave wall, which was fixed, as above explained, between the line of the heaps of slate on the outside and the edge of the cement floor of the nave inside. In section a - b the latter is marked by a slight error as 'red floor'—it

should of course be ' (yellow) cement floor ' : it is further not marked in section c - d, as it was found here too disintegrated to be reliably distinguished from the surrounding débris. In section e - f it is overlaid by stacks of slates and roof-tiles : the curious square Pit or Hole 25, which lies beneath it here, is described below, p. 233.

Below these sections, F E is the outside elevation of the south nave wall, answering to the right-hand portion of A B E F at the top of the sheet : the site of the west wall appears on the left, and further to the right the conjectural site of the south door and the column-base built into the wall just beyond.

The bottom row of elevations comprises K J and I H, the exteriors respectively of the east and west walls of the north transept, and E D, D C, and C B, those of the west, south, and east walls of the south transept : the possible position of former windows answering to that recognized in E D is shewn in all.

A lettered key-plan occupies the centre of the sheet, and in the bottom right-hand corner is a sketch shewing the appearance which the remains of the chapel would present, as seen from the south, with Winchester Cathedral in the background, if they were cleared of the overlying mound of débris and the trees growing upon it.

When in due time these trees die, and the clump consists only of those recently planted around the edge of the mound covering the chapel, such a clearance could be effected without spoiling the picturesque appearance of the Hill, and the remains of the chapel might well thus be permanently exposed and preserved for the eyes of posterity.

MOULDED STONE (fig. 22)

In addition to the drums and bases of piers found as described *in situ*, there was among the masses of masonry débris encumbering the ruins of the chapel a quantity of moulded stone, among which the best pieces are here illustrated (nos. 1 - 15). In the following descriptive list, Q = Quarr stone, Ch. = Chalk : the presence of worked stone of any other kind was not attested save by the discovery of two fragments of a Purbeck marble slab just inside the Early Iron Age Entrance on its north side. Perhaps the pack-animals of Wriothesley's breaking-up gang passed this way and dropped them : it is anyhow only reasonable to derive them from the chapel, and one might guess them to be the remains of a desecrated altar-stone.

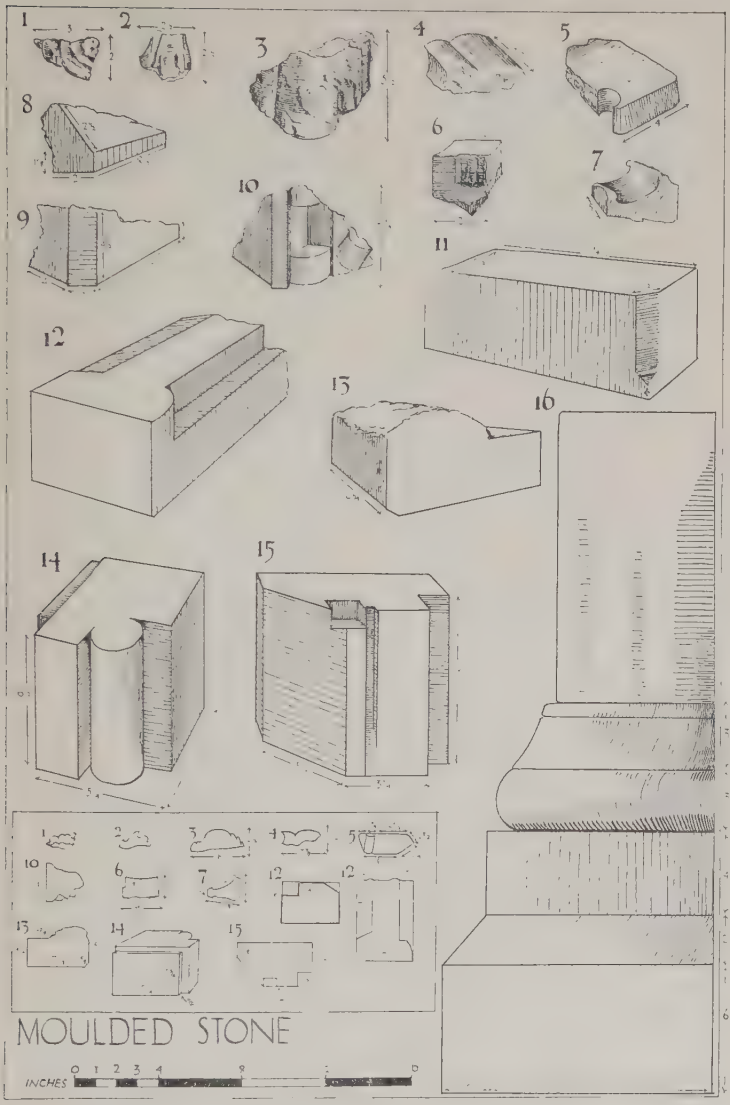


FIG. 22. (See pp. 220-2.)

		Where found.	*Remarks.*
1.	Q.	West end of nave.	Fragment of decorative moulding.
2.	Q.	,, ,,	,, ,, ,,
3.	Q.	,, ,,	Fragment of draped statue, perhaps an angel.
4.	Ch.	,, ,,	Low double moulding.
5.	Q.	South wall of chancel.	Perforation, perhaps for window-bar.
6.	Q.	West end of nave.	Upper face concave and coated with white plaster.
7.	Ch.	,, ,,	Probably flanking of window.
8.	Ch.	South wall of chancel.	Plain: well squared.
9.	Ch.	Domestic rooms.	Presumably flanking of window or door (*cf.* no. 11).
10.	Q.	West end of nave.	Billet-moulding with part of chevron-ornament.
11.	Ch.	South wall of chancel.	Lower termination of bevelled flanking of window or door.
12.	Q.	,, ,,	Part of moulded window-sill.
13.	Ch.	,, ,,	Bevel as on no. 9, but smaller.
14.	Ch.	Inside north wall of chancel. Near east end.	Flanking shaft of window.
15.	Ch.	South wall of chancel.	Splayed flanking of window or door, with socket presumably for bar, and vertical groove rising to vanish near bottom.

No. 16 is an elevation of the type of shaft and base used on the piers, with one drum in position: like nos. 1 - 15, it requires a date in the earlier part of the 12th century. The following note gives the evidence here afforded for the closer fixing of the date of the later chapel; that of the early chapel cannot so be fixed, in the absence of any such evidence associated with its remains.

ARCHITECTURAL EVIDENCE FOR THE DATE OF THE LATER CHAPEL

1. An upper limit of date is provided by no. 10 in the above list, which in addition to the regular Norman billet-moulding shews part of what has clearly been chevron-ornament, and must therefore be after about 1110.

2. The moulding of the pier-shaft base, no. 16, is of the regular 'Western' type which lasted till about 1120 - 30. In the absence of any material requiring a later date this supplies the lower limit, as all the pieces may safely be placed in the first quarter of the 12th century.[1]

1. The substance of these two paragraphs has been kindly supplied by Mr. A. W. Clapham, F.S.A.

Consideration of typical base-mouldings of the period from buildings in the immediate neighbourhood shews the range of variation in the local modifications of the 'Western' type, as illustrated by nos. 1 - 5, fig. 23.

As compared with the St. Catharine's Chapel moulding (no. 4), that from St. Cross (no. 1) shews its later date by its reduced lower projection and its more regularly-shaped *f*-curve: St. Cross was founded in 1136 by Bishop Henry de Blois, and the piscina whence this example comes may be confidently dated about 1160, when the 'Western' type proper had become thus modified. On the other hand, no. 2, from the tower of Winchester Cathedral as rebuilt after its fall in 1107, is allied

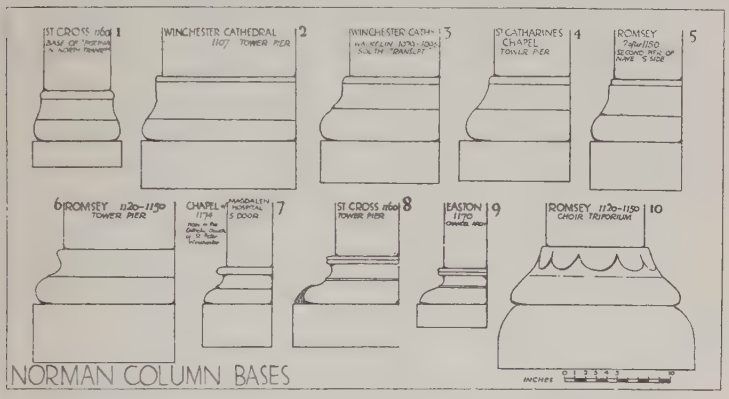


FIG. 23.
Comparative Chart of Column-base mouldings (pp. 222 - 4).

by its vertical upper portion and its angular concavity to no. 3, which belongs to Bishop Walkelin's Cathedral built in the latter part of the preceding century, and shews the earlier form of the type. The St. Catharine's Chapel moulding (no. 4) thus comes between nos. 2 and 1, but it is also fairly similar to one (no. 5) from that portion of the nave of Romsey Abbey which is dated to 1150 - 70 in *V.C.H. Hants* IV, p. 460 ff. If this moulding is really of so late a date, it is anomalous, as by the middle of the 12th century the flatter type of moulding shewn in nos. 6 - 9, fig. 23, had come into general use. The St. Catharine's Hill moulding at least seems to stand before the development of this type, which had begun before 1150, as no. 6 from the tower at Romsey shews: its later evolution is

shewn by no. 7, from the doorway of the former Hospital of St. Mary Magdalen, on the eastern hill above Winchester, now re-erected in the Roman Catholic Church in Jewry Street, and further by no. 8 from the tower at St. Cross, which is roughly contemporary with the modified form of the earlier type from the same church (no. 1), and by no. 9, about 10 years later, from the chancel arch of Easton Church. The overlapping of the two series is thus illustrated, and if the Romsey example (no. 5) is really after 1150 it looks like a survival for the sake of conformity with the adjoining earlier work, as no. 10 from the choir triforium may be dated (like no. 6) 1120 - 50, and in spite of its different ornamentation is clearly a form of the same earlier type, as shewn at St. Catharine's Chapel. No. 5 may then be treated as a special case which need not disturb the natural dating of our mouldings before about 1120 - 30, and we may reasonably sum up by dating the later chapel as nearly as possible between 1110 and 1125.

It was clearly built in the regular tradition of the larger Norman churches of cruciform plan with a central tower, and its nave is of the length usually given to those of aisled churches of this type (60 ft. was probably the original measurement at Romsey), suggesting that it was designed and expected to be an important building.[1] We shall find this notion confirmed by what is known of the history of English devotion to its patron Saint (see below, p. 248 ff.).

ROOFING MATERIALS (fig. 24)

These have received general discussion above (pp. 202 - 5): it is only required here to give a brief inventory of the types of material discovered, of which the chief are illustrated opposite, and marked below with an asterisk.

1 TILES.

Glazed.

Type A.* Coarse thick ware, heavy light-green glaze: flat and coping tiles, thickness $\frac{1}{2}$ in. to $\frac{7}{8}$ in.

(*a*) The coping tiles have either plain pointed finial, length at base $2\frac{1}{8}$ in., height $1\frac{1}{8}$ in., thickness $\frac{7}{8}$ in.: or elaborate semi-circular finial with aperture and six slashes at base, length at base 6 in., height 3 in., thickness $\frac{7}{8}$ in. to 1 in.

(*b*) An odd fragment of light-green glazed ware, ribbed, and glazed both sides, $2\frac{3}{8}$ in. long, $\frac{3}{8}$ in. thick.

1. *V.C.H. Hants* IV p. 461.

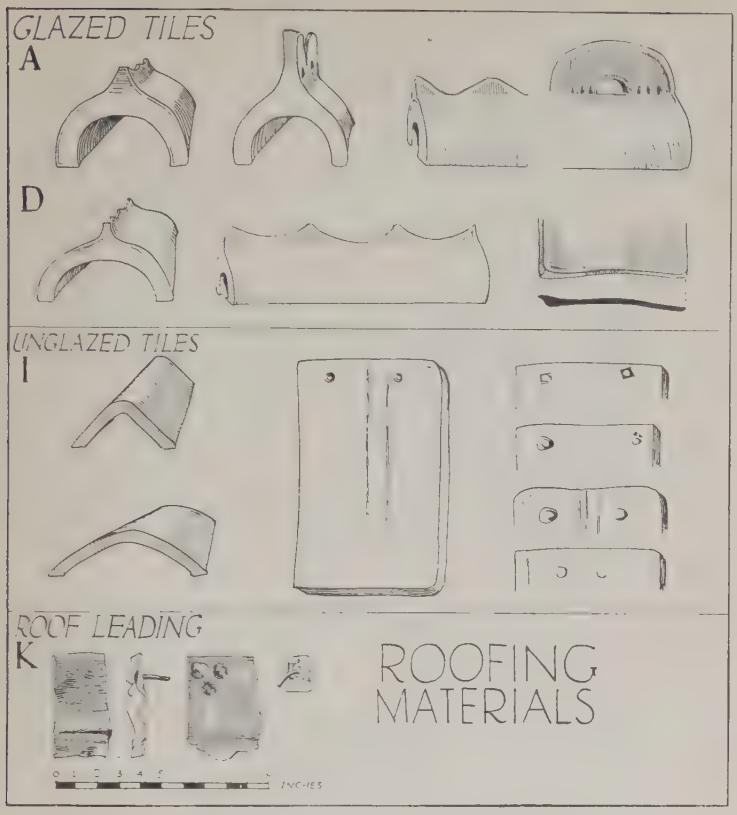


FIG. 24. (See pp. 224-6.)

Type B. Coarse thick flinty ware, thin brownish green glaze: flat and coping tiles, thickness ½ in. to ⅞ in.
Similar finials, length 1⅝ in.

Type C. Fine thick gritless ware, brownish-green glaze: flat only, thickness ½ in. to ⅞ in.

Type D.* Fine thin pink ware, widening to flanged edge, partially covered with green spotty glaze: similar to the pottery exx. nos. 44 and 47 in figs. 26 and 27 respectively (see below, pp. 238-40), thickness ⅜ in. to ⅞ in.

(*a*) Flat tiles, ¼ in. thick: at edge ⅜ in. to ½ in.
One was mortared on both sides and had slate adhering to one side.

(*b*) Coping tiles: scallops 4 in. long, finials ⅝ in. to 1⅛ in. high: ⅜ in. to ⅞ in. thick.
One was mortared all over.

Compare similar scalloped tile in Northampton Museum from the Drapery, Northampton.

Type E. Coarse flinty ware, glossy orange-green glaze: coping tiles only. Thickness $\frac{3}{4}$ in., length of scallops $1\frac{1}{2}$ in.

Type F. Glossy yellowish-brown glaze splashed on at edge: with peg-holes, flat only: thickness $\frac{1}{2}$ in.

Type G. Fine ware, very glossy bright-green glaze: coping tiles only. Thickness $\frac{3}{8}$ in.: length of scallop $3\frac{1}{2}$ in.

Type H. Very glossy foamy orange brown glaze: flat only. Thickness $\frac{1}{2}$ in. to $\frac{7}{8}$ in.

Type H was confined to the Domestic Rooms, while types A - G were found mainly along the chancel walls, and at the west end of the nave.

Unglazed.

Type I.* Coarse ware, moulded lines running at various intervals: peg-holes for wooden pegs (one was found) punched at average interval of 2 in. with a square tool, or a round tool with square incuse: holes $\frac{1}{2}$ in. to $\frac{5}{8}$ in. in diam.

The ware is yellow, orange, or red, with slightly flanged edges. Average size 11 in. or 12 in. by $5\frac{3}{4}$ in., $6\frac{3}{4}$ in., 8 in.: thickness $\frac{1}{2}$ in. to $\frac{5}{8}$ in.

Found in very large quantities at all levels, especially on the yellow floor in the nave.

Coping tiles are of finer grain: exact dimensions doubtful. They are confined to south transept, so probably connected with the secondary occupation there.

II. BLUE SLATE.

Type J. The slates are fairly thick, with circular holes for nails (in one example the nail still remained in the hole): they generally bear traces of cement on one side. Average dimensions 11 in. by $7\frac{1}{2}$ in.: thickness $\frac{3}{8}$ in.

III. ROOF LEADING.

Type K.* The pieces of leading are rectangular, with holes for nails, at least one of which remained in every case. They are either from spouts or gutters, or perhaps more probably are slips which were put in under a loose slate or tile and bent over upwards at the bottom to hold it up.

Normal size 5 in. by $2\frac{1}{2}$ in., with two nails.

Also pieces 5 in. by $3\frac{1}{2}$ in., with three nails.
$2\frac{1}{2}$ in. by $2\frac{1}{2}$ in., ,, two ,,
2 in. by 1 in., ,, one nail.

For the nails see below, p. 247.

GLAZING MATERIALS

A certain number of small fragments of very corroded stained glass were found on the chapel site, the only stratified ones being in the destruction layer in the south transept (section g - h, fig. 20) sealed by the red flooring of the secondary occupation. Some strips of glass-leading were also found, twisted and in poor condition. One had contained the usual diamond-shaped quarries.

THE MINOR EARTHWORKS

Now that the chapel and its structure have been fully reviewed, it is necessary, before describing the contemporary pottery and objects discovered, to notice the minor earthworks present on the Hill, most of which may be considered mediæval. They are numbered as Ditches 1 - 8 : for their location see general plan, fig. 36, and for sections the accompanying fig. 25.

Ditch 1 forms three sides of a slightly embanked enclosure at the east end of the chapel. Its northern arm was found to be unconnected with Ditch 2 or any other earthwork on the west, but to end abruptly some 60 ft. almost due north of the north transept, the intervening space being apparently quite unenclosed. The northern arm of the ditch runs for 140 ft. just north of east from this terminal point, and then a turn to the south - south - east forms the eastern arm, 75 ft. long, on which the Maze abuts and is aligned (see p. 273 below). The south arm is set at right angles to this, which makes it nearly parallel with the south wall of the chapel, its bottom running some 10 ft. south of the latter's alignment. At a point 20 ft. east of the south-east corner of the early chapel, it curves a little north of west so as to make straight for this corner, where it presumably ends, though tree-roots prevented its being traced for the latter half of the distance.

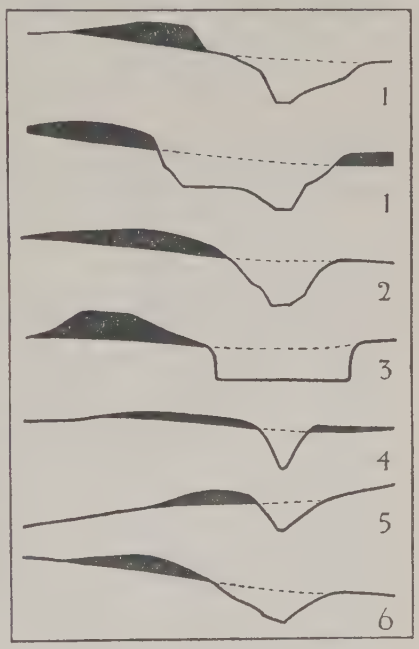


Fig. 25.
Sections of Minor Earthworks (pp. 95-6 and 227-31). Scale $\frac{1}{150}$.

This last portion of it had clearly undergone subsequent alteration (see plan, fig. 19). The section of the original work was found both in the north and south arms to have the profile shewn in the first drawing in fig. 25, where the outer face of

the ditch has an irregular slope inclined at about half the angle of the inner face, from which the upcast, all of which was on the inner side, was separated by a considerable berm, the lip having become eroded as shewn. But nearly 30 ft. east of the south-east corner of the early chapel the ditch had been cut back on a curve to the north-west, rather shallower than the original bottom, the berm thus disappearing and the increased upcast being heaped on the very edge of the new inner face, as shewn in the second drawing in fig. 25. Unfortunately the upcast was too disintegrated to reveal stratification distinguishing the original from the secondary deposit, but comparison of the two sections leaves no doubt that this was what occurred.

This new cutting of the termination of the ditch ran for 15 ft. from its point of divergence from the original cutting, and then stopped 11 ft. south of Room 2 of the Domestic Buildings. That the latter is a secondary addition to Room 1 has been seen, and it is possible that the alteration of the ditch was made at the time of its construction. For the ditch as a whole is certainly mediæval and associated with the Chapel and Domestic Rooms, which it encloses on three sides, and analysis of the contents of the upcast and silt indicates further that it was not dug until the Chapel and presumably Domestic Room 1 at least had been in existence for a considerable time. Both the primary and the secondary ends of the ditch were clearly designed to receive drainage from the roofs.

Besides stray fragments of Early Iron Age pottery, the silt contained two glazed pitcher-handles, probably of the 14th century, and a fragment with dark glazed lines in relief as on the 14th century pitcher-neck no. 67, fig. 26, as well as unglazed cooking-pot rims (*e.g.* nos. 32, 33, fig. 28) of type prevalent all over the site. The upcast contained as well as some plain examples, decorated glazed pitcher-handles of the cabled type of nos. 97 - 99, fig. 26, which is not earlier than the 14th century, and decorated fragments of the 14th - 15th century types of nos. 88 - 93: also unglazed cooking-pot rims of the most prevalent forms, including the decorated no. 187, fig. 28. The inference, that the ditch is of fairly late mediæval date, is reasonably plain, and the further precision desirable in view of the difficulty of distinguishing upcast proper from surface-soil where many of these sherds were found is provided by the iron key (I 26 in fig. 29), which as is decided below (p. 246) is of the period 1300 - 1350: this was found well down in the upcast

of the north arm, and must have been already discarded when the ditch was dug. The second half of the 14th century is thus an acceptable date for Ditch 1.

Such rectangular enclosure-ditches were probably normal in the Middle Ages for a variety of purposes; a not very dissimilar one near Morgan's Hill, Wilts, excavated by Mrs. Cunnington,[1] had numerous gaps and was probably a village sheepfold: the purpose of Ditch 1 is not so clear, but it is very possibly the 'Cymytorie' ditch mentioned in Wriothesley's lease (see p. 195 above). No graves indeed were found, but the enclosure was not exhaustively trenched, and this notion is supported by the absence of a western arm to the ditch. If the cemetery was instituted in expectation of a number of burials, room for expansion would be afforded if one side was left without an enclosing ditch, and closed only by a fence or hurdling which could be moved outwards if and as required. If this was the case, it would seem that the site acquired inadequate popularity as a place of burial, which is perhaps not surprising, especially as we shall find reason to suspect the decline of devotion to St. Catharine in the 15th century (see pp. 254-6).

Ditch 2, traceable as a wide arc of a circle passing some 80 ft. west of the west front of the chapel, was at first expected to be a prehistoric earthwork of earlier date than the Iron Age fortification; but this hope was disappointed, as by digging at the northern limit of its surface indication it was found to be cut through the top of the rubbish filling the mediæval chalk-pit N (see pp. 232-3 below).

There is nothing in the post-Reformation history of the Hill to suggest a date for it subsequent to the destruction of the chapel, for it is clearly a boundary-ditch, and as such the most plausible explanation, since none of the rubbish in Pit N need be later than the 14th century, is to connect it with the possibility that a clump of trees stood on the Hill in the 15th century: at least it encloses far too large an area to have anything to do with the subsequent plantation of 1762. It might well be such a boundary-ditch from its section, and in plan it recalls the plantation-ditch shewn in the air photograph of Calstone Fields, Calne, Wilts, in *Wessex from the Air*, pl. XXVIII, which is absent from the early 18th century map *ibid.* pl. XXIX. For the chronology of the St. Catharine's Hill plantations see below

1. *W.A.M.* XXXVI, p. 590 ff. For the earthwork surrounding St. Catharine's Chapel, Milton Abbey, Dorset, see below, pp. 251-2.

pp. 261, 267, 282, 285: there is here nothing further to say concerning this ditch, which it was not possible to pursue to its end in either direction.

Ditch 3 was found to be L-shaped in plan. Its southern arm runs rather south of west, from a point about 35 ft. south-west of the south-west corner of the south transept, for a distance of 42 ft., being 9 ft. wide, cut square into the chalk to a depth of 4 ft. below the upcast bank on the south, which is 12 ft. wide. Ditch and bank then turn not very abruptly north-westward, and run on past a 'pipe' of natural clay to vanish in the dump of rubbish from the destruction of the chapel outside its west end.

The width and profile of this ditch are peculiar, but it seems to mark the south-west corner of the chapel precinct, and is certainly of mediæval date, as on its bottom was found a ring (pl. XVI, 7) probably of the late 13th century (see below, p. 245), and what scanty fragments of rubbish the silt contained were at latest mediæval up to a line 1 ft. from the bottom, which was marked by a thick layer of slate, tile, and masonry débris, unmistakably attesting the destruction of the chapel. It may thus be believed that the ditch, dug late in the 13th century at the earliest, was half silted up at the time of the destruction, which was responsible for most of the rest of the filling. Near where it vanished on the north was found an Edward III silver halfpenny (pl. XVI, 2, and p. 243).

Ditch 4 has been seen above (pp. 95-6) to belong without much doubt to the Early Iron Age.

Ditch 5 runs eastward through the Early Iron Age counterscarp some 250 ft. south of the Entrance, and is lost in the Sewage Farm. It is presumably connected with the secondary ditch noticed above in Sections 2 and 3 through the Early Iron Age defences (fig. 4), and requires treatment along with Ditches 6 and 7.

Ditch 6 is in fact the continuation of this same secondary ditch, which having run along the Early Iron Age ditch as above described (pp. 23, 26-7) as far as a point 600 ft. south of the Entrance and just beyond Domum Cross, turns outwards at right angles, and cutting through the counterscarp turns somewhat north of east to run down the slope, and again northwards into the Sewage Farm (see fig. 1). It will be wise not to attempt to trace it further,[1] but fairly clearly it forms the boundary of an area on the gentle eastern slope of the Hill which

1. *cf.* Williams Freeman, *Field Archæology*, pp. 253, 403.

was enclosed in the Middle Ages or perhaps later, but is quite unconnected with the Sewage Farm, a 19th century creation. It has been seen above how the Early Iron Age ditch was silted up practically to its present level when it was dug; at the point where it cuts through the counterscarp by Domum Cross its upcast was easily distinguishable overlying the Early Iron Age counterscarp bank.

The excavations in it here produced no finds.

Ditch 7. The same secondary ditch has been shewn to run northwards across the Entrance causeway: no doubt it continues along the Early Iron Age ditch as before until, by cutting through the counterscarp once more, it emerges on the northern slope of the hill as Ditch 7. This was not excavated, but though the Sewage Farm hedge runs along it northwards down the Hill and follows its right-angle turn westwards (see fig. 1), it is plainly older than this, as where the hedge turns northward again to reach the foot of the Hill by the modern path leading up from the railway, the ditch and its accompanying bank run straight on westward across the path till cut away by the big chalk-pit. It is here that clear evidence that it enclosed cultivated land is forthcoming, for between this last stretch and the railway a series of low plough-banks are discernible running parallel to it across the slope (see fig. 1). It thus appears that the whole area bounded by this ditch on the north and east of the Hill was formerly enclosed, in part at least, for cultivation. Ditches 6 and 7 are thus not prehistoric 'boundary-ditches' or 'covered ways,' but simply the bounds of this enclosure, very possibly once marked also by a hedge line, while Ditch 5 must represent an internal boundary, or possibly even the original limit of the area on the south, Ditch 6 thus marking a later extension.

Ditch 8 was not excavated. It appears as a slight depression running into the Sewage Farm out of the Early Iron Age ditch between the Entrance and Ditch 5—it may reasonably be considered as similar to the latter, and certainly as no more important.

THE PATHS

None of these, which are marked on fig. 1, require notice save that running down the northern hillside by an easy gradient south-west and north-east above the lip of the chalk-pit, and disappearing under the Sewage Farm hedge and the continuation

of Ditch 7. It looks earlier than both these, and also than the steeper paths which breach the Early Iron Age earthwork at its northernmost part, and it is unmistakably terraced. Possibly this was done at or after the building of the earlier or more probably of the later chapel, while the steeper paths, which are largely worn into steps, are no doubt chiefly due to the College from the 16th century onwards (see below, p. 259 ff.).

THE MEDIÆVAL AND LATER PITS

While the Early Iron Age pits were found only in exceptional cases to be marked by depressions on the surface, the bulk of those which are so marked turned out to be mediæval, though a few, unexcavated, look quite modern. For the location of these pits see the general plan, fig. 36, where they are distinguished from those of the Early Iron Age by smaller capital letters.

Pit B, at the edge of which Early Iron Age pottery, etc., was discovered as noticed above (p. 89), was itself certainly dug to extract the sand here present as a pocket in the chalk, and may thus be considered a small example of the same type as Pit H.

Pit C contained some fragments of mediæval pottery, and was clearly a chalk-pit dug to obtain blocks for the Chapel buildings.

Pit D, just south of it, was not excavated but probably another: west of these a quarry-face in the chalk was found to stretch 80 feet or more north and south, and must have been dug for the same purpose.

Pits E, F, and G, west of this, were not excavated and look modern.

Pit H was found to be dug quite deep into a natural pocket or swallow-hole of sand in the chalk, no doubt to get material for mortar for the chapel buildings.

Pit I, just west of this, was not excavated but had perhaps the same purpose.

Pits J and L, north and east of the chapel, were not excavated and certainly look modern.

Pit N was a very deep mediæval chalk-pit, much larger than Pit C, which had been filled with rubbish including much

pottery, none of which need be later than the 14th century; through the top of this Ditch 2 was dug as explained above (p. 229).

Pit O, close to the Domestic Rooms on the north-west, was dug in a large sand-hole, with a roughly-cut flight of steps leading into it. Its object was clearly material for mortar for the chapel, and its filling contained mediæval pottery.

Pit U was dug with the same purpose in a swallow-hole of sand at the east end of the chapel, and its peculiar position relative to the east wall has been discussed and accounted for above (p. 207).

THE SMALLER HOLES, 19-25 (see fig. 19)

In the north-east angle of Ditch 1 was found Hole 19, which was full of mediæval rubbish, and was presumably a cesspit: it was at least 12 ft. deep.

Holes 20-24, south and east of the Domestic Rooms, could not be reliably dated, though the presence in and all around them of mediæval pottery and rubbish suggests that they were dug by occupants of the rooms for the disposal of refuse.

Hole 25, a curious rectangular excavation in the natural chalk inside the chapel nave near the west end, could not be accounted for: its filling of quite clean chalk rubble only contained the fragmentary glazed pitcher no. 69 (fig. 26), datable somewhere in the latter two centuries of the chapel's existence, and so, though the hole was apparently sealed by the cement floor of the nave, as shewn in section e-f, fig. 21, it was presumably actually dug through it and re-covered, an operation of which the floor in its ruined state would naturally show no traces.

Most of these pits and holes contained fragments of Early Iron Age pottery, in common with the surface soil around them and all over the chapel area.

THE MOUNDS (see fig. 36)

The four small low mounds lying near Pit N on the north-west probably all consist of upcast from it. This is certainly true of the largest of them, which was excavated in the hope that it might prove to be a denuded round barrow.

THE LARGE CHALK-PIT

The chalk-pit by the northern path up the Hill has long been disused, and seems to be of great age; an oil painting in the College of about 1692 shews it apparently just as it is now (see below, fig. 32). The chalk required for the chapel was quarried in pits on the top of the Hill, and if this chalk-pit should be connected with any single event, a likely occasion for so big a work would be the embankment of a canal up the Itchen from Northam to Alresford by Bishop Godfrey de Lucy (1189-1204). His canal was the predecessor of the present disused Itchen Navigation, which passes immediately below the pit (see above, fig. 1), and must have required large quantities of chalk for its embankment.

THE MEDIÆVAL POTTERY

I.—Glazed (figs. 26-27).

NOTE.—The writer of this section desires to acknowledge his indebtedness to Mr. R. L. Hobson, Keeper of the Department of Ceramics in the British Museum, for helpful advice and criticism.

The typological study of English mediæval glazed pottery has never been able to advance beyond a rather elementary stage for two reasons: first, there is an almost prohibitive dearth of reliably dated examples; second, it is doubtful whether a regular development of types really exists to be traced save in rather broad outline, and it is accordingly wise not to press suggested criteria of date too closely.

To Mr. Hobson's *Catalogue of English Pottery in the British Museum* (1903) reference will be made where possible abbreviated as *B.M. Cat.*, and his paper in *Arch. Journ.* LIX (1902), p. 1 ff. may also be consulted.

The pottery is of course all made on the wheel. The most important type of glazed vessel to be considered is the handled pitcher, and for its history in broad outline attention must first be directed to the series of small drawings at the bottom of fig. 27, selected from the collections in the Winchester and the Northampton Museums.

The 13th century is the earliest period of which it is possible to speak at all definitely, and of this the tall narrow pitcher at

the right-hand end of the row is typical. Here the swelling of the body is slight and comes low down, the mouth is tapering rather than everted, and the upper end of the handle springs not very far below it, while the base pinched out between finger and thumb is present, though not so prevalent as it became later.

Towards the close of the century the mouth shews a tendency to become everted, and a more pronounced contraction appears above the base, while there may be a greater swelling of the body: of this stage the vessels fourth and sixth from the left of the row are each in their way typical—the latter may be dated about 1300.

In the 14th century two more or less distinct types of pitcher may be observed. One, in which the handle normally springs from the rim of the mouth, has a tendency to squatness, as in the vessel fifth from the left of the row, between the two noticed in the preceding paragraph. This tendency is sometimes pronounced, and continues in the 15th century; the neck is apt almost to coalesce with the wide body, and even to merge altogether into it, as is shewn by the vessels seventh, eighth and ninth along the row from the left: here also the increased prominence of decoration, which may take the form of a human face, is to be noticed, and also the gradual dying out of the clumsy expedient of the thumb-pinched base, which seems to have been most prevalent in the 14th century and to have diminished as the art of potting later improved. The other type is long-necked, with rim well everted and handle springing well below the mouth, while the swelling of the body is emphasized: the third vessel from the left of the row is a good 14th century example, and the body gets more and more swollen. In the 15th century, while this type no doubt continued in various forms, the development of a shortened form of it is to be noted with a cylindrical neck, as in the vessel on the extreme left of the row, and the example next to it shews how the distinction is apt to disappear between this and small specimens of the former type, with neck tending to coalesce with the body.

Cabled decoration on the handle appears in the 14th century, and various forms of ornament on the body become more prevalent as this and the ensuing century go on.

The glaze is applied externally almost invariably all over the neck, and usually to the body and most of the base: thus while

many pots are glazed right down to the foot, a fair proportion are found on which the glaze thins out to vanish before the foot is reached, and the under side of the base is only quite occasionally found glazed.

A rather yellowish dark green is the prevailing colour, but various shades of brown, reddish-brown, green and yellow may occur. The tendency of the glaze to flake off is often remarkable: many quite large sherds bore only minute specks to shew that they had once been glazed. It was not till towards the 16th century that a thicker, more lustrous, and at the same time more durable glaze is met with, and a stage in the improvement of English potting under the Tudors is marked by the 'Farnham ware' to be noticed below as associated with the secondary occupation of the south transept.

The clay used for mediæval glazed pottery is never so coarse as that of the roughest unglazed wares: it is close-grained, hard, and of uniform texture, ranging over every variety of colour—buff, brown, purplish, blue, grey, pink, and almost white.

The classification adopted for the pottery here illustrated is intended to be no more than a convenient method for defining the leading features of the yield of this particular site.

Handled pitchers form the leading series to be considered. We have already seen that the earliest recognized type is the tall narrow pitcher of the 13th century: this type, exemplified by *B.M. Cat.*, figs. 38-41, could not be identified at all on St. Catharine's Hill. This is not to say that 13th century pottery is absent: vessels may have been reduced to featureless fragments, and anyhow at so early a date the proportion of glazed to unglazed wares is naturally lower than at a later period, and it may reasonably be assumed that the earlier two centuries of the life of the chapel are represented for us mainly by unglazed pottery. It must also be remembered that all this pottery is to be connected most closely with the Domestic Building, which cannot be proved coeval, strictly speaking, with either the earlier or the later chapel, and in any case seems at first to have consisted of one room only.

The 14th century is much more fully represented. As no pitchers were found of which the complete profile could be restored, examples with neck and body contour of unmistakable pitcher type are here grouped to form the first class.

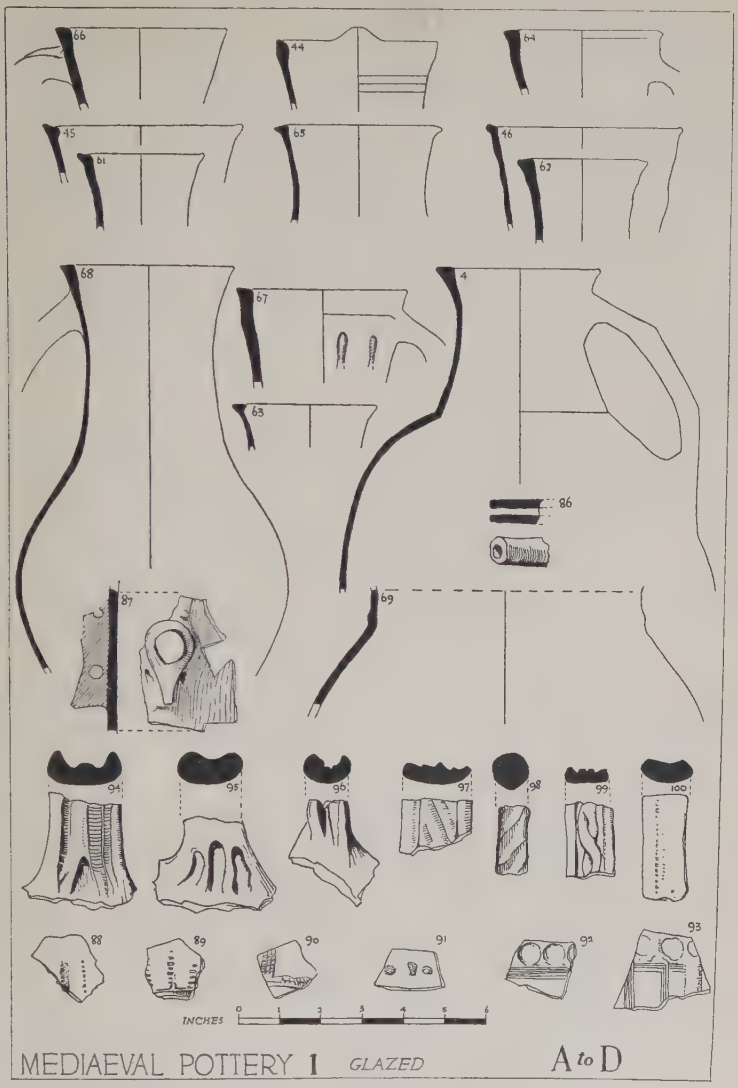


FIG. 26. (See p. 238.)

Class A, nos. 4, 44–6, 61–9.
Class B, nos. 86–7.
Class C, nos. 94–100.
Class D, nos. 88–93.

Class A occupies the whole of the top half of fig. 26, and comprises a reasonable range of 14th century types. Ten examples (nos. 44-6 and 61-7), preserving the upper part of the neck only, give a representative selection of lip-mouldings, while of the two shewing the body-profile as well, no. 68, from the floor of the south transept beneath the destruction-rubbish (see pp. 201, 216, appears to be the earliest of the illustrated series, as it recalls the vessel (sixth from the left) in the row at the bottom of fig. 27 attributed above to *c.* 1300. No. 4, on the other hand, is a late, perhaps a 15th century example, as is suggested by its big swollen body and shortened rather squat neck. No. 69, inserted below it for comparison, is not likely to be earlier, and seems to have been a wide-mouthed vessel with some affinity to the cooking-pot class I, dealt with below.

The marks of the potter's wheel are prominent within, and external ornament of parallel horizontal lines or vertical burnt strips is present occasionally, appliqué decoration very rarely.

The decorative and other features liable to occur on vessels of this type will next be classified.

Class B: Spouts (fig. 26; 86, 87).

A slight spout is sometimes to be seen on the lip of these pitchers, but two other more pronounced forms require notice. No. 86 is a straight cylindrical spout which is as likely to have projected from the body as from the neck of the vessel, whatever its shape. No. 87 projects through a straight neck suggesting the 15th century (see below, p. 240, on Class H): it is ornamented and elaborated with transverse holes above and below. The spout on the example of Class E below (no. 73, fig. 27, *q.v.*) is not dissimilar, and the two vessels may have been alike: the 15th century is anyhow the probable date.

Class C: Handles (fig. 26: 94-100).

The various forms of grooved and cabled handles belonging to these pitchers are exemplified by nos. 94-100, which are most of them probably 14th century. No. 100, with square punching, was the only one of its type. On the whole, decorated handles were about twice as numerous as plain handles.

Class D: Surface Decoration (fig. 26: 88-93).

The type of decoration appearing on these six representative pieces are as follows, in descending order of frequency:—

(i) Parallel straight (or curved) lines incised before glazing (92, 93: also 44 at top of fig. 26 and 1 in fig. 27).
(ii) Lines or patches burnt on to glaze (88, 91: also 67 above), often cutting across examples of (i) (1, fig. 27).
(iii) Raised lines or bands, moulded before glazing (89, 93).
(iv) Finger-prints in rows (92, 93).
(v) Lines of square punch-marks (88, 89).
(vi) Applied bands covered with incised trellis-pattern (90, the only example).

These types may be considered largely 15th century, though some, at least, began in the 14th, *e.g.* (i) and (ii): see below on fig. 27, 1, under Class F.

Class E (fig. 27: 73).

Double-rimmed and double-spouted neck of a vessel with appliqué decoration, no doubt of the 15th century: the only example of its form, but the appliqué ornament occurred in six other cases: *cf.* also D (vi).

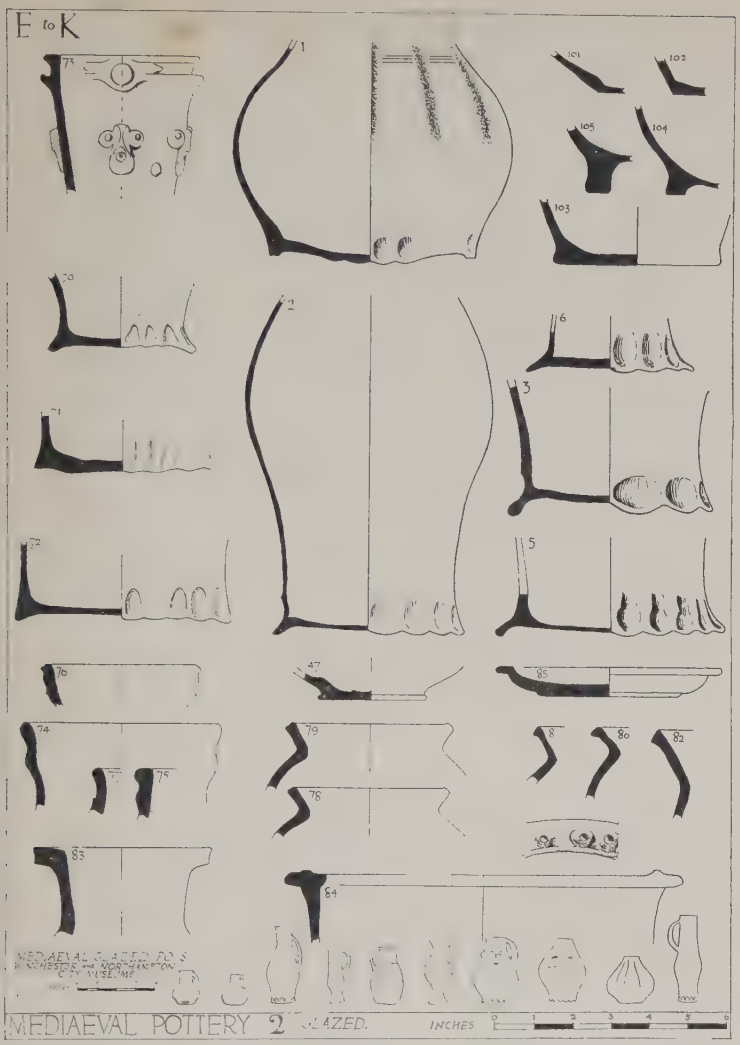


FIG. 27. (See pp. 234-5 and 238-40.)

Class E, no. 73.
Class F, nos. 1-3, 5-6, 70-2, 101-5.
Class G, nos. 74-7.
Class H, no. 83.
Class I, nos. 78-82.
Class J, no. 84.
Class K, no. 85.

Class F: Bases (fig. 27: 1-3, 5-6, 47, 70-72, 101-5).

To be associated mainly with Class A necks.

(i) Flat and featureless bases (101-2) were rare: there were only three examples.

(ii) Bases with feet pinched out between finger and thumb (in a few cases with a tool) were common, the pinchings either continuous or in threes or fours (1-3, 5-6, 70-2). Most of these clearly belonged to regular 14th century pitchers like no. 2, which must have had necks of Class A. No. 1, with decoration of types D (i) and D (ii), resembles a vessel figured in the Luttrell Psalter (*B.M. Cat.*, fig. 43), and this rather squat type was therefore in use about 1840.

(iii) Plain moulded feet were rare (only three examples): no. 103 may be put near the turn of the 14th - 15th centuries, and no. 47, with its careful beading, in the 15th century certainly.

(iv) Bases with a definite footstand (104-5) were also rare (six examples). They seem to be 15th century, as the association of some with appliqué knobs further suggests.

The early mediæval 'sagging' base, on which all these are improvements, was absent: more stable forms were already current in the 12th century.

Class G: Cordoned Rims (fig. 27: 74-77).

There were only six examples: no. 74 at least may be 15th century.

Class H: Straight or nearly straight neck with lip everted at right angles (fig. 27: 83, the only example).

This suggests the straight necked squat form of *B.M. Cat.*, figs. 63, 65 (former dated to Henry V by documents found in it), which is apparently 15th century.

Class I: Cooking-pot Rims (fig. 27: 78-82).

These cooking-pots or jars are much commoner unglazed than glazed (see below): they all have knobbed everted rims, the variations of which defy classification. There were only ten glazed examples.

Class J: Wide flanged rim with raised ornament (fig. 27: 84, the only example).

On this curious piece (body form uncertain) the decorative knobs were on the top of the rim, and each had a round punch-mark in its top. Date perhaps 15th century: *cf.* no. 73 above, Class E.

Class K: Flat Dishes, glazed inside (fig. 27: 85).

Five examples were found, not all as likely to be 15th century as no. 85.

A quantitative analysis of the mediæval glazed ware shows a marked predominance of pieces likely to be 14th over those likely to be 15th century: in all, parts of over 200 distinct vessels could be recognized, without considering the more featureless fragments.

The pottery was distributed all over the chapel site, especially thickly in and around the Domestic Rooms, and more sparsely over the surrounding area of the Hill.

The pieces of 16th century Farnham ware found in the secondary floor in the south transept may be distinguished as Class L (not illustrated): the paste is in this case whitish with good, lustrous rather pale-green glaze: a rim and handle occurred, decorated above with ribbed lines.

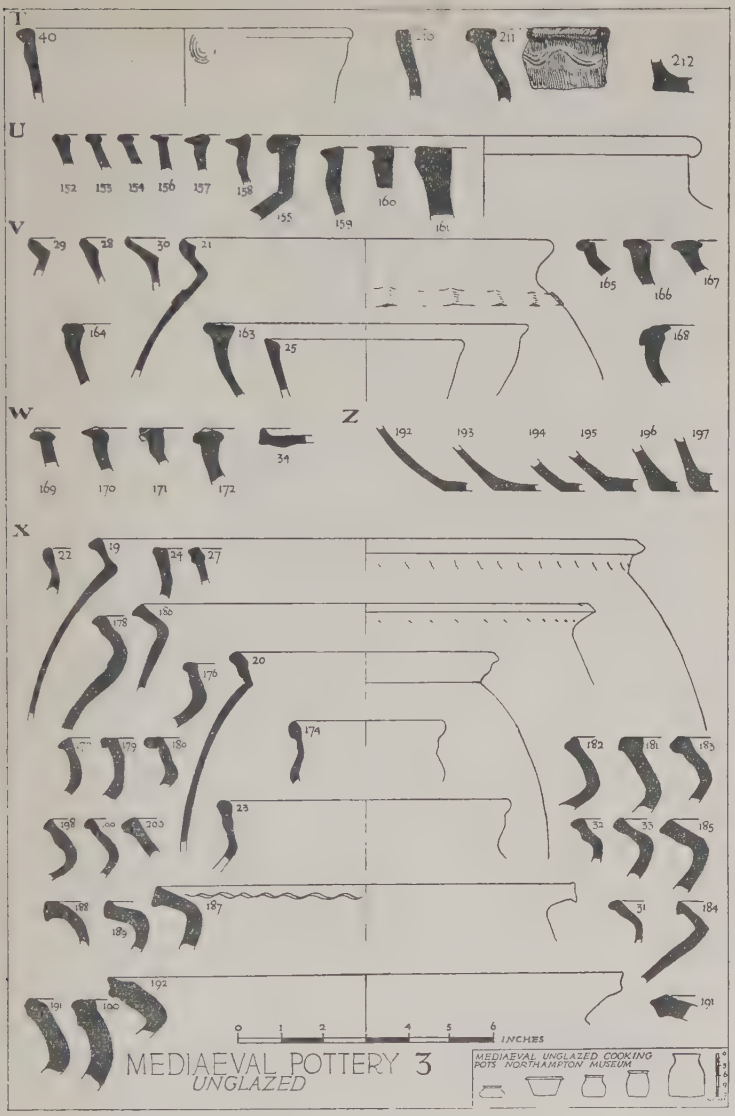


FIG. 28. (See p. 242.)
Classes T, U, V, W, X and Z; also Class Y (nos. 19, 21, 186-7, 211).

II.—Unglazed (fig. 28)

Any approach to classification by suggested chronology would here be wholly out of place. Little more can be done than to group the types of rim and base, so as to make possible an easy review of the range of forms found.

The paste of the ware, though often inferior, resembles in general that used for glazing, but in addition a notably coarse, gritty quality is met with, much of which is certainly coeval wholly or partly with the rest, but which was possibly in existence earlier and in the Norman period.

Class T: (40, 210-212) illustrates fragments of this coarse pottery such as might be guessed to be contemporary with the building of the later or even of the earlier chapel.

Class U: (152-161) comprises rims with horizontally projecting lip or flange.

Class V: (21, 25, 28-30, 34, 163-168) consists of rims with varying degrees of upward or outward curve.

There were some 25 recognizable examples of each of these two classes.

Class W: (169-172) illustrates some half a dozen rims found in or near the Domestic Rooms with finger-moulded depressions at intervals.

Class X: (19-20, 22-24, 27, 31-33, 174-192, 198-200) illustrates as amply as possible the variations in the profile of the unglazed cooking-pots found in such quantities especially near the Domestic Rooms, where over 100 of the 150 odd specimens occurred. The rims are knobbed and normally everted at a slant, and nos. 19 and 20 show the usual form of body, though more swollen examples occur like no. 184. In some cases the size attained is very large, and vessels like nos. 190-192 were no doubt big storage-jars.

As Class Y such forms of decoration as were found on unglazed vessels may be grouped, but it was very rare, and usually little more than a series of faint stabs (19, 186). Wavy-line ornament occasionally appeared (211, 187); also horizontal grooving on the neck, and in one case finger-printing. Seven pieces were found of jars of rather fine ware, pink to buff, with applied pinched-up ribbon decoration round the shoulder (21).

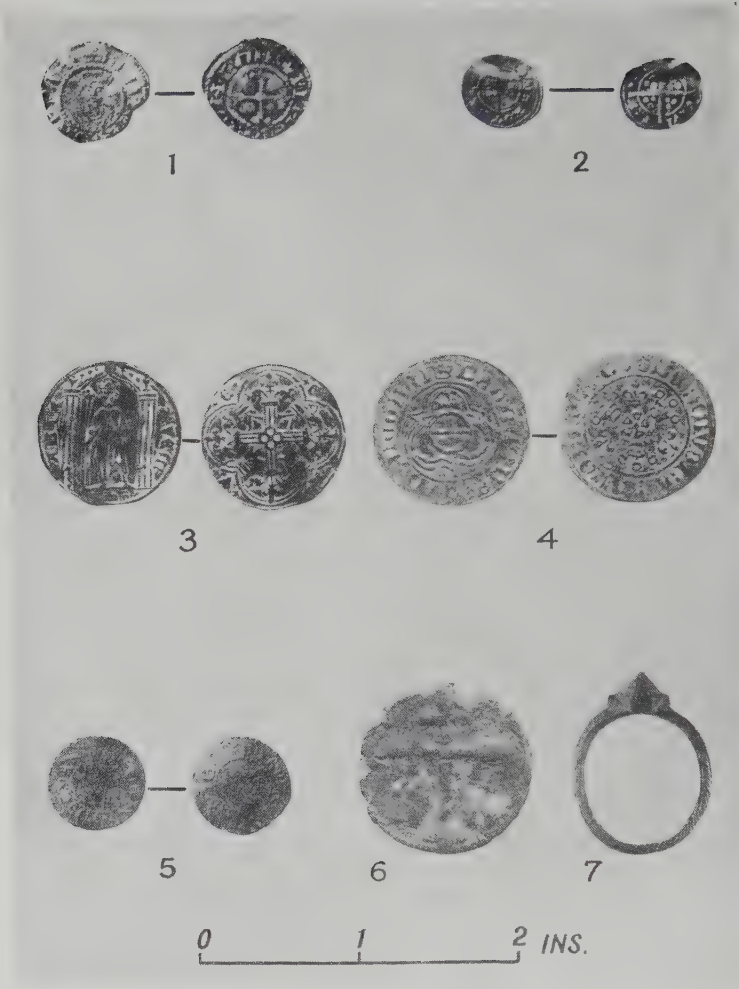
Broadly speaking, however, the unglazed ware is plain. Only four handles (cylindrical or double-ridged) were found.

Class Z (192-197). No vessels were discovered with completely restorable profile, and the bases can therefore be grouped separately under this head. In no case was there any kind of projecting foot or any other noteworthy feature. The bases were often caked with soot.

The distribution of unglazed pottery was roughly the same as that of glazed—the total of recognizable fragments of distinct vessels was between 300 and 400.

Whereas the glazed pottery is chiefly to be ascribed to the 14th and 15th centuries, there is no reason to suppose that the unglazed ware does not cover the whole lifetime of the chapel, as there is no recognized evolution of type in these uninteresting vessels.

Typical examples, from the Northampton Museum, are appended at the bottom of fig. 28.



1, 2. Mediæval silver coins (p. 243).
3, 4. Jettons (pp. 243-4).
5. Farthing token (p. 244).
6. Lead pack-seal (p. 244).
7. Lead finger-ring (p. 245).

MEDIÆVAL COINS AND JETTONS

(Plate XVI.)

1. **Silver penny**[1] of Henry I, type X: Canterbury mint, moneyer Winedi or Winedaeg; struck *c.* 1120 - 1125.

Obv. Facing bust of King: leg. ✣ **HENRICVS : REX : ĀN.**

Rev. Cross fleury: leg. ✣ **PINEDEI ON CĀN.**

Not remarkable for good workmanship, nor in very good condition: the edge has been partly clipped. Found on the roadway through the Early Iron Age Entrance; if, as is very possible, this coin was current at the time of the building of the later chapel, it suggests that this Entrance was then in use: men as well as materials would in fact naturally pass this way from and to Winchester, and perhaps one of them inadvertently dropped his pay.

2. **Silver halfpenny**[2] of Edward III: London mint; issue of 1369 - 1377.

Obv. Facing bust of King: leg. **(E)DWĀRDVS RE(X ĀN).**

Rev. Cross fleury and pellets: leg. **CIVITĀS LON(DON).**

Very worn and bent. Weight only 5 grains: a halfpenny at this period should weigh 9 grains, the loss in this case being due to clipping and wear.

Found in the disturbed area outside the west end of the chapel.

3. **Jetton,** perhaps 14th century. **Æ.**

Obv. A King crowned, with long staff in right hand, standing to front in an ogee-arched canopy with finials: leg. **AVEM ARIA** (*sic*).

Rev. Quatrefoil containing cross fleury with four pellets at intersection of the arms; the cusps of the quatrefoil terminate in fleurs-de-lys: leg. **C A V E**, one letter in each spandrel.

The type is suggested by the Roial d'Or of William III, Count of Hainault (1304 - 1337), whose daughter Philippa married Edward III. (F. P. Barnard, *The Casting Counter, etc.*, pl. V, 21, and cp. pl. II, 39, and p. 102).

Found unstratified outside south transept.

4. **Nuremberg Jetton. Æ.**

Obv. Trefoil containing orb surmounted by a cross, the whole surrounded by a meaningless legend.

1. This coin was kindly identified by Mr. G. C. Brooke of the British Museum.
2. The substance of this note is due to Sir Charles Oman, who kindly examined the coin.

Rev. Pattern of fleurs-de-lys and pellets, surrounding a conventional five-petalled flower, the whole surrounded by a meaningless legend. A very common Nuremberg type of the 16th - 17th centuries, very rarely bearing a date. This specimen is most closely paralleled by those of Conrad Laufer (F. P. Barnard, *op. cit.*, pl. XXXIII, 82, 83, 85), but could be earlier.

It was found beneath the fourth and last floor in the later chancel, and should therefore antedate that floor, but it must be remembered firstly that the floor is not very complete and therefore the counter may have penetrated it after the destruction; and, secondly, that while the earliest dated counter of this type which Mr. Barnard has seen is of 1553,[1] the upper limits of its occurrence are not certainly known, and are possibly as early as 1500. The evidence of this counter cannot, therefore, be used with any certainty in interpreting the chronology of the chancel floors.

LATER COINS, Etc. (Plate XVI.)

For convenience, the list of these is appended here.

5. **Winchester Trade Token** (farthing), 1657. Æ.

Obv. $\frac{W}{S.M}$ surrounded by leg.: ANTHONY · WISEMAN.

Rev. Date 1657 surrounded by leg.: DRAPER · IN · WINTON.

cf. G. C. Kent, *British Metallic Coins and Tradesmen's Tokens* (1912), p. 287, no. 233 (similar farthing token of 1667).

It may be noted that the obverse reads WSM whichever way up it is turned. Condition, fair. Found on the site of the Domestic Rooms.

6. **Lead Pack-Seal,** 17th or 18th century.

Obv. Design of scales or triple gallows.

Rev. Blank.

See *British Numismatic Journal* IV (1907), p. 337: use as a hop-picker's or tavern token is not impossible. Condition, worn. Found in 1897 by a workman engaged in trenching near the south transept (see p. 197), and acquired by the writers.

There were also found:—Two George II halfpennies, one with date illegible, the other 1747: one halfpenny of Queen Victoria, a modern Chinese coin (brass), and a French 25-centime piece, 1923: all these occurred in the surface-soil in the Entrance area except the first mentioned, which was found on the site of the Domestic Rooms.

1. Information in a letter from Mr. Barnard.

OBJECTS OF METAL

Silver.

Along with the pack-seal no. 6 above, a silver spur is said to have been found in 1897: this, however, was acquired on the spot by a clergyman from whom the writers have not been enabled to hear.

Lead Finger-Ring (plate XVI, 7).

The ring has a conical bezel decorated with horizontal grooves and surrounded by a border of raised pellets. The band is ornamented with a continuous pattern of diagonal lines.

There is no parallel to this ring in the British Museum, the Victoria and Albert, or the Ashmolean. Mr. Reginald Smith, who has seen a photograph, suggests that it is late 13th century in date and used perhaps as undertaker's furniture. This recalls the 'cymytorie' mentioned above (pp. 195, 229), but such a conjecture can hardly be pressed.

Found at the bottom of Ditch 3 (see p. 230 above).

Iron (fig. 29).

The illustrated specimens are described in the order in which they are drawn in fig. 29, beginning with the group at the top right-hand corner and then passing along the two main rows of drawings, the upper first, from left to right.

I 26. Key: length $2\frac{1}{4}$, breadth of bow 1, of bit $\frac{5}{8}$ ins.

The classical dated series of mediæval keys is that in the Salisbury Museum, described by W. E. W. Penny in *The Connoisseur*, vol. XXIX (January-April, 1911), pp. 11-16.[1] The dating is authenticated by the stratification revealed by the drainage excavations in which

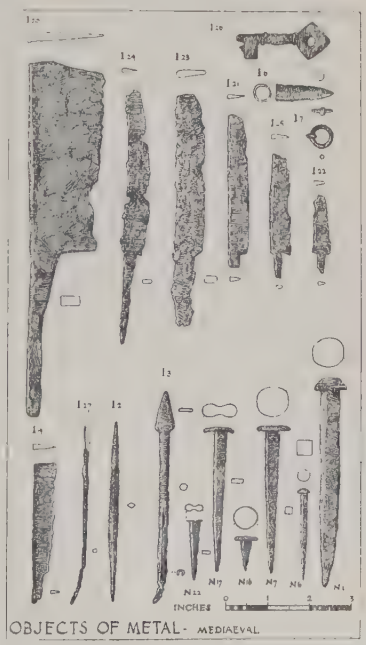


FIG. 29. (See pp. 245-7.)

1. This reference has been kindly supplied by Mr. A. B. Tonnochy, F.S.A., of the British Museum, who further examined the key and supported the conclusion here reached.

most of these keys were found during the 1860's in Salisbury, which was a virgin site in the 13th century, and it is corroborated by representations of keys in mediæval art.

1. Up to the end of the 13th century keys with lozenge-shaped bows had the angles of these ornamented with foliations. In the 14th century the foliations disappear, and the lozenge-shaped bow is found plain till about 1350, when the bow begins to be filled and pierced in a manner recalling contemporary window-tracery. In the 15th century the lozenge-shaped bow disappears altogether.

2. Early keys have very simple wards: during the 14th and still more in the 15th century these become increasingly complicated.

3. Up to the end of the 13th century keys are usually cut from a single plate of iron and the stem rolled.

4. Early keys tend to considerable length, and short examples are hardly earlier than the 14th century.

In the light of these conclusions, our key may be reviewed as follows:—

1. It has a lozenge-shaped bow, not foliated as before the 14th century, or filled with tracery as after *c.* 1350, but plain.

2. Its wards are very simple, simpler even than those of Penny's example (*op. cit.* pl. II, 5) which it otherwise closely resembles, though not made like it to operate from both sides of the lock. It thus stands before the later 14th and 15th century tendency to complication.

3. It is not cut and rolled from a single plate, as was usual before the 14th century.

4. It is too short to be earlier than the 14th century. It is, like the example of Penny's cited, a door-key, not a chest key, and the foregoing considerations date it safely to the period 1300 - 1350.

It was found in the upcast of the north arm of Ditch 1, on the date of which its bearing has been discussed above (pp. 228-9).

I 6. Small pointed ferrule. Disturbed area outside west end of Chapel.

I 7. Small ring with attachment. Same area.

I 20. Chopper, tanged and with oblong blade, the back hammered down. Pit N, among rubbish at low level.

I 24. Part of tanged knife. Chapel site, unstratified.

I 23. Part of tanged knife. Domestic Room I.

I 21. Part of smaller tanged knife. Hole 19.

I 25. Part of tanged knife, end of blade at acute angle to tang. Chapel site, unstratified.

I 22. Part of small double-bladed tanged knife. Hole 19.

I 4. Part of tanged knife or razor. Disturbed area outside west end of Chapel.

I 27. Bodkin, the eye broken. Chapel site, unstratified.

I 2. Thin tool pointed at both ends, section diamond-shaped. Perhaps a file. Disturbed area outside west end of Chapel.

I 3. Grooved graving-tool, with tang of arrow-head shape. (N.B.—In the drawing the latter is shewn uppermost). Same area.

Many other iron objects were found on and around the chapel site; the majority of doubtful purpose and date; iron

strapping, many staples of various forms, and part of a horse-shoe may be mentioned. There were also more than 450 nails, all of which had stems square or rectangular in section; they were especially numerous in the area outside the west end and south of the chancel, and were associated closely with the heaps of broken roofing-slate and tile. Many certainly came from the roof, one being found fixed in a piece of slate and others in lead sheeting.

N 22, N 17. Short and long examples of a large class (about 100 in all) with flattened stems and flat heads of figure-of-eight shape.

N 16, N 7. Short and long examples of the prevalent square-stemmed type with flat round heads.

N 6, N 1. Short and long examples of the common square-stemmed type with round (more rarely square) conical heads. These probably came from doors or other structural woodwork, and included the largest specimens from the site (length from 4 to nearly 6 ins.).

Though certainty is impossible on a site so lacking in stratification, mediæval nails no doubt form the bulk of those discovered.

REPORT ON THE MAMMALIAN REMAINS

The mammalian remains from the chapel site and neighbourhood, and from the earthworks and pits of mediæval date, have been submitted to Mr. L. H. Dudley Buxton, Lecturer in Physical Anthropology in the University of Oxford, and to Miss Dorothea M. A. Bate, of the Department of Geology, British Museum (Natural History), Cromwell Road, the substance of whose reports is here given in tabular form. The possible presence of such remains dating from the Early Iron Age must not be overlooked, and in fact Miss Bate distinguishes from the size of the remains two types of *Bos*, one of which, *bos longifrons*, must belong to the period of the Early Iron Age settlement, while the other is the larger animal of mediæval and modern type. Two species of *Equus* were also distinguishable, the smaller of which came only from the chapel site and may be the donkey.

Chapel site.	*Bos*, *equus* (small), *sus*, sheep or goat, *canis*, rabbit (1 bone only).
Domestic Rooms area.	*Bos*, *sus*, sheep or goat.
Ditch 1, silt.	*Bos* (small), sheep or goat.
Ditch 1, surface-soil.	*Bos* (young), *equus*, *sus*, sheep or goat, goose (1 bone only).
Ditch 2.	*Bos*, *equus*, *sus*, sheep or goat.

Ditch 3 and neighbourhood, including disturbed area outside west end of Chapel.	*Bos*, *sus*, and sheep or goat in almost equal proportions: *equus* (a few teeth only); mostly young animals, many bones sawn, and most nearly unmineralized, though a few exceptions were perhaps Early Iron Age. Oyster-shells and fish-bones also present.
Pit C.	*Bos*, *equus*, sheep or goat.
Pit N (under Ditch 2).	*Bos*, *equus* (small: complete cannon-bone), sheep or goat.

Domestic and food animals thus account for the whole group.

ON THE HISTORY OF DEVOTION TO ST. CATHARINE IN MEDIÆVAL ENGLAND

NOTE.—Detailed reference is impossible in this essay save in a few leading cases to the archæological and topographical literature consulted.

Valuable information has also most courteously been supplied by a number of the parish clergy, to whom the writer desires to acknowledge his gratitude.

The archæological material provided by the chapel and its surroundings has now been exhaustively reviewed. We have seen that a small chapel of unknown date was enlarged between 1110 and 1125 to form a large cruciform towered structure which, with domestic buildings attached, stood on the Hill till after the first quarter of the 16th century, and was clearly a noteworthy local centre of devotion. Its patron Saint was St. Catharine of Alexandria [1] and it is worth while to pause at this point and attempt to sketch something of the history of her popularity in England and its part in the religious life of the Middle Ages.[2] In so doing we may find additional light thrown on the chapel which has been our concern.

The conventional date for the martyrdom of the virgin St. Catharine is 307, but there is no mention of her in history or legend for some centuries afterwards. Her story may be said in fact to begin with the discovery in the early 9th century of her supposed corpse on Mount Sinai, where the Christian community, then suffering from Moslem persecution, saw advan-

1. The name is here spelt Catharine throughout, but many of her dedications spell it Katharine, Katherine, or Catherine; the mediæval orthography naturally varies, and it is of course not suggested that uniformity is desirable.

2. The chief secondary authority used has been Miss F. Arnold-Forster's *Studies in Church Dedications* (1899), cited hereafter as *A-F*, reference to which is recommended, though some of her statistical data will be found here to have been modified.

tage both spiritual and material in attaching to an unknown body a legendary sanctity and all that that might imply.

The symbolic name *Καθάρινα* that was bestowed stood in Greek for purity, and the legend in presenting so typical a figure of the pure, devout, and beautiful girl martyr bears all the stamp of pious romance, though no doubt the type was realized in many of the sufferers under the Imperial persecutions, both known and unknown. St. Catharine is thus one of a limited number in the Calendar of Saints who are not so much historical as edifying.

The story that became traditional is as follows.

Catharine was the only daughter and heiress of the King of Egypt, who was himself descended from the father of the Emperor Constantine the Great. She was good, beautiful, and devoted to learning. When she was 14 (the date is supposed to be in the early years of the 4th century) her father died, and she reigned in Alexandria as sole Queen, steadfastly refusing wedlock, for though as yet a pagan, she declared that she would be content only with a husband far above herself in all gifts of nature and grace, thus embracing albeit in ignorance an ideal which Christ alone could satisfy. In due course she was converted to the Faith by a hermit, and resolved to become the bride of Christ alone. The persecuting Roman Emperor Maxentius then intervened, and set pagan philosophers to pervert her, but the result of the disputations which followed was the conversion of the philosophers themselves, who consequently suffered martyrdom at Maxentius' hands. The enraged Emperor condemned her to breaking on the wheel, but Divine intervention rewarded her prayers, and it was the wheel that was broken. Thereupon, however, she was ordered to be scourged and beheaded, and this time the sentence was carried out. Her body was miraculously borne by angels to the grave on Mount Sinai where it was found five centuries later, on the spot marked by the famous monastery which bears her name.

It seems improbable that any genuine source lies behind this myth, but the attribution of a story of the kind to such a persecution as Maxentius' was easy, and hagiography was enriched. The Saint received a pedigree, and November 25th became her festival. Her cult soon became popular, but was for the present confined to the Christian East, and her legendary Acts were edited, with some attempt at the pruning of details,

by Metaphrastes, a noted 10th century collector of sacred stories.

It has been regularly said that she only became known to Western Christendom in the course of the First Crusade, and there seems to be no positive evidence to contradict this very reasonable notion. The date of the First Crusade being 1095 - 1099, her devotion may be said to have come in with the 12th century.[1] There are indeed in England three churches dedicated to her where earlier building is known, namely Houghton-on-Hill (Leics.), Little Bardfield (Essex), and Ringshall (Suffolk), and there are other cases, such as Merstham (Surrey) and Fritton (Norfolk) where Domesday records a church, the predecessor of the present one, but in all these there has been 12th century rebuilding or alteration which would form a likely occasion for re-dedication, and no doubt many Saxon dedications were changed in this way in the 12th century. At Barmby Moor (Yorks), where Saxon work existed in the church before its 19th century restoration, St. Catharine was patroness at least as far back as 1252, but was probably preceded by St. Peter, as the date of the village feast suggests : here the most likely occasion for re-dedication is the known rebuilding of the church in the 12th century. At least from the very beginning of this century the popularity of St. Catharine would make her a likely choice : in about 1110 her life formed the subject of a miracle play acted at Dunstable,[2] and early in the century the village of Catherington (Hants) was bearing her name, clearly owing to the dedication to her of the church that must have preceded the existing building of nearly a century later, in which the dedication remains unchanged.[3]

Among parish churches perhaps the earliest of this dedication is St. Catharine Cree, London, which was in existence by 1108 ;[4] that at Tugford (Salop) was standing by 1158, and the saint is the patroness at Irchester (Northants), Loversal (Yorks), St. Catharine near Batheaston (Somerset), Swell (Somerset), and Teversal (Notts), though the last combines her with St. Mary ; while re-dedication is not impossible in any of these

1. Her name is absent from Anglo-Saxon Kalendars, *e.g.* those of the Missal of Robert of Jumièges (early 11th century), and of the Homiliary of St. Wulfstan (1064-70) (*Arch.* 78, p. 219 ff.), and there seems to be no literary evidence of this or any other kind that she was known in England before the closing years of the 11th century.

2. *A-F* I, p. 119.

3. *V.C.H. Hants* III, pp. 94, 100.

4. Stow, *Survey of London*, ed. Kingsford, I, p. 140.

five, the origin of the fabric is 12th century in them all. There is clearer evidence that the dedication is original in the case of a number of 12th century chapelries: at the chapel at Hylton Castle (Durham) it dates from 1157; at Leconfield (Yorks) the church, originally a chapel in Elton parish, dates from later in the same century, and early glass portraying the Saint argues the dedication to be coeval; at Temple (Cornwall) there is no doubt of it: the foundation was that of a small commandery of the Knights Templars, which lasted from a date in the 12th century till the suppression in 1314, after which the chapel (subsequently ruinous and now rebuilt) passed to the Hospitallers. This is especially interesting as a clear case of the importing of the Saint by returned Crusaders in the 12th century.

Milton Abbey, Dorset, was founded by King Athelstan in 938, in consequence, we are told, of a vision vouchsafed him when encamped on the hill overlooking its site on the east by St. Sampson of Dol, who foretold his victory in the approaching battle of Brunanburh. It is apparently established that a chapel was built on this spot at the same time as the Abbey below, and it must have been dedicated to St. Sampson; but in the 12th century the existing building superseded this, and it was certainly then that the dedication, which has since remained unchanged, was transferred to St. Catharine.[1] This is a good instance of a re-dedication such as we have already suspected in the case of the parish churches mentioned above, effected when devotion to the Saint was new and at its most popular. A particular motive appears in this case, for the chapel is on a hill, and from the first the Saint's legendary association with Mount Sinai suggested hill-tops as appropriate sites for her chapels. Our later chapel, by far the largest of them in England, is of course a striking instance of this, and the question of the early chapel will be discussed below in the light of the analogies cited, especially this of the Milton Chapel. The latter, which has been fitted with some Perpendicular windows and undergone subsequent desecration and restoration, was served from Milton Abbey and was a resort of pilgrims, and the source of its maintenance is indicated by an extant 13th century inscription on brass by the south door:

INDVLGENCIA : ꝑ' : S̄C̄I : LOCI : C : € : X : DIES.

1. Hutchins, *History and Antiquities of Dorset*, ed. Shipps and Hodson, 1873, Vol. IV, p. 409; H. Pentin in *Memorials of Old Dorset*, p. 103 ff.; F. R. Heath, *Dorset* p. 201.

It is surrounded on three sides by a low earthwork, 137 by 51 paces, which has been attributed to King Athelstan's army as being too large for a chapel-yard, but which rather recalls our Ditch I (see p. 229 above).

Milton Abbey was responsible for another 12th century chapel of St. Catharine on a hill overlooking the sea at Holworth (Dorset), near Lulworth—the land belonged to the Abbey and still belongs to Milton Abbas parish. A modern chapel now represents the original building, known as St. Catharine's-by-the-Sea.[1] Another 12th century example, if the dedication be coeval with the earliest building, is the chapelry at Ickleford (Herts).

At Bath, St. Catharine, jointly with St. John the Evangelist and St. Werburgh, had a chapel founded in 1170 on the site of the Fountain buildings (ruined at the Reformation), and she actually became patroness of the city: a passage in the Freemen's oath, as given in the *Ruber Codex Bathoniae* (1412) runs: "Seynt Katern day Y schal kepe holy day yerely and seynt Katern Chapell and the brygge help to mentayne and to susteyne by my powre."[2] The association of this loyalty with maintaining the bridge is typical. The Saint had another notable 12th century foundation in the collegiate church and hospital founded near the Tower of London in 1148 by Matilda, which subsequently became a parish church.[3]

It is clear that St. Catharine achieved instant popularity on her introduction into England, both as a romantic figure appealing to popular imagination and as the patroness of learning, which received such an impulse in the 12th century.

She has five 13th century parish churches: Chalfield Magna (Wilts), Draughton (Northants), Litlington (Cambs), Preston-by-Faversham (Kent), and Weston Birt (Glos): re-dedication is at least unlikely at Preston, where there is an image of her about 1300, while at Litlington a 12th century font points to an earlier church. The case of Barmby Moor, where she very possibly superseded St. Peter in this century, has already been noticed and also, in a previous section,[4] the church of her dedication in Winchester (sometimes confused with our chapel), which was certainly by this time in existence. Of chapels dedicated to her in larger churches a good 13th century example

1. Pentin, *op. cit.*, pp. 104, 108.
2. King and Watts, *Municipal Records of Bath*, p. 46.
3. Stow, *op. cit.* I, p. 123.
4. See p. 193 above.

exists in Carlisle Cathedral: the 13th century chapel at Towersey (Bucks) bears her name, and also those at Haydon (Dorset), a chapelry to Sherborne Priory, and Holt (Wilts), chapelry to Bradford-on-Avon, where a 12th century font again suggests an earlier building. In spite of the possibility of re-dedication, there is no likelihood of so great a falling-off in her popularity as would be implied in the scouting of any large proportion of dedications to her in this century: in the next, there are several examples of the building of isolated chapels under her name, which shew that the tradition, begun early as our chapel and that at Milton prove, was maintained at least until the Black Death.

In 1312, on the high hill of Chale in the south of the Isle of Wight to which, as to the headland below, the Saint has given her name, a hermitage was standing, but out of repair, and in that year Bishop Woodlock licensed its rebuilding by Walter de Godston in dedication to St. Catharine (John Langeberewe was the first priest); the chapel, no doubt the 'oratorium' mentioned in a letter of Bishop Stratford (17th Aug., 1328), was a small buttressed building some 20 ft. by 10 abutting at its west end on to the 4-storeyed octagonal light-house, 36 ft. high, still standing, which may be contemporary, though the existing doorheads are 15th century at earliest. It has owed its preservation to its use as a sea-mark, which the foundation was probably from the first intended to supply.[1]

The 14th century chapel of St. Catharine on the hill just south of Guildford is one of the best known in the country, and that near Christchurch, on the hill of Rishton near Winkton (Hants), was existing in 1331, as in that year Bishop Stratford inhibited the Prior of Christchurch, to whom the chapel belonged, from celebrating there owing to breach of various formalities, and licence was not restored till the next year.[2] How much older than this the chapel was is unknown, but it might be 12th century: a similar uncertainty attaches to the chapelries of this dedication at Crook (Westmoreland), Popham (Hants) and Shorne (Kent). However, those at Blackrod, near Bolton (Lancs), and Hoddesdon (Herts) are certainly

1. *V.C.H. Hants* V, p. 235: see also *H.F.C.* X, pt. 1, p. 12 ff., and *cf.* J. C. Cox, *Churches of I. of Wight*, p. 75 ff.; Woodlock's Register of 1312 reads: "hermitorium supra Montem de Chale in Insula Vecta nostre diocesis in honorem S. Katerine Virginis construendum et reparandum."
A-F III, p. 80, wrongly gives the date as 1323.

2. *V.C.H. Hants* II, p. 155: V, p. 109.

14th century, and at Eskdale (Cumberland) a chapelry in St. Bees which became a parish in 1445, the earliest extant building is of about 1330, and the legend ꝛCV CVTRIBV on a 15th century bell, and a 14th century stained-glass representation of the Saint (lost in 1881), substantiate the originality of the dedication. Here, however, there is a tradition that the chapel was first founded in the 12th century by Ranulph de Meschyn, lord of the earldom of Carlisle, and dedicated to St. Catharine since it was on her feast that the White Ship sank and drowned his nephew, Richard Earl of Chester. But the truth of this story must remain uncertain. Near here also there is an ancient St. Catharine's Well, and till about the middle of the last century a fair was held at Eskdale on St. Catharine's day, known as Kattie Fair, yarn, hides, etc., being exposed for sale on the walls adjacent to the church.

There was a Guild Chapel of St. Catharine in the Church of St. Paul at Stamford (Northants), and at Gloucester she had a chapel belonging to the Priory of St. Oswald, the predecessor of a modern parish church; the Priory was a Saxon foundation, but the date of the chapel is unknown.

Of 14th century parish churches St. Catharine Coleman (London), Montacute (Somerset), and apparently Flempton (Suffolk) have always borne this dedication, and the same may be true of Ludham (Norfolk), Winterbourne Bassett (Wilts) and Wormington (Glos).

The Black Death made a great rift in the religious and social life of England, and after this devotion to St. Catharine seems to have fallen off considerably. Her dedication appears at Pettaugh (Suffolk), where the church can hardly be earlier than the 15th century, and at Gosfield (Essex), where it may be dated about 1435: her only isolated 15th century chapel seems to be that at Abbotsbury (Dorset), a fine hill-top chapel overlooking the sea, belonging apparently to Edward IV's reign and perhaps founded as some act of reparation connected with the Wars of the Roses, and though she has a fine chapel in Cirencester Church founded in 1508 by Richard Osmund, with a notable fresco of her martyrdom on its south wall, the list of her datable mediæval dedications is closed when we have mentioned Catharine Hall, Cambridge (now St. Catharine's College), founded in 1473 by Robert Woderlarke, third Provost of King's, and incorporated by charter two years later. Here

her character as the patroness of learning clearly indicates a special case.

However, her devotion, which had taken so strong a hold on the country in the years immediately following its introduction, had established considerable traditions. Her name was soon a favourite one for christening. The wheel that is her symbol has become a household word and also a not infrequent sign for inns, in which 'the Catharine Wheel' sometimes appears [1] as 'the Cat and Wheel.' On the downs east of Cerne Abbas (Dorset) once stood an inn called 'The Cat and Chapel,' said to mark the site and preserve the name of a chapel of St. Catharine. As the patroness of spinsters, her intercession by women desiring husbands came to be regularly sought: we may compare the French idiom, familiar to readers of Henri Bué, 'coiffer Ste. Catharine,' alluding to what became an established practice among women anxious for matrimony, and inspiring popular doggerel litanies.[2] Acts of devotion by citizens of London may be cited as typical. In 1348 John de Holegh, hosier, bequeaths £20 'to any one going a pilgrimage to the Holy Sepulchre in Jerusalem and to the tomb of St. Katherine on Mount Synay'—though he is careful to provide in an ensuing clause of his will against the inability of his executors to find such a person.[3] Bequests are received by 'the sisters of St. Katherine towards the tower' in 1354,[4] by 'the women of the house of St. Katherine' in 1361,[5] and by the churches of St. Catharine Cree, St. Catharine Coleman and St. Catharine by the Tower [6] constantly. There was a Fraternity of St. Catharine near the Tower, which received bequests, *e.g.* in 1378 [7] and in 1386 [8] and had a light in that church, to which money was also bequeathed in 1386,[9] as also to the Saint's light in the church of All Hallows, Stanyng. In St. Catharine Coleman church the Saint had another Fraternity, which was moved to Edward III's New Abbey near the Tower not long before 1376, when it benefited under a will proved five years later.[10] The Haberdashers of London had a Brotherhood in her name, to which money was left in 1368[11]: it was incorporated as a Guild or Fraternity in 1448[12] and confirmed by Henry VII.[13]

1. As at Bristol: G. J. Monson-Fitzjohn, *Quaint Signs of Old Inns*, p. 44
2. See Pentin, *op. cit.*, pp. 105-6.
3. *Cal. Wills* i, 657.
4. *ib.* i, 688.
5. *ib.* ii, 106.
6. *e.g. ib.* ii, 143.
7. *ib.* ii, 209.
8. *ib.* ii, 268.
9. *ib.* ii, 343.
10. *ib.* ii, 220.
11. *ib.* ii, 132.
12. *Cal. Patent Rolls*, Henry VI, V, 164.
13. Stow, *op. cit* I, p. 298.

It is in fact fair historically to summarize the Saint's devotion as having achieved on its introduction at the very beginning of the 12th century an immediate popularity, which lasted over two centuries and diminished most noticeably only after the Black Death, though not before the establishment of a strong popular tradition. It will be convenient here to add the names of the places where mediæval dedications to her are known but of uncertain date:—Burbage (Leics), Cossall (Notts), Drayton (Somerset), Flaxley (Glos.),[1] Holbeck (Yorks.), Kingsdown (Kent), Netherhampton (Wilts), Sedgehill (Wilts), Towthorpe (Yorks., E. Riding), Whitstone (Devon), Wolverton (Hants).[2]

The list of mediæval dedications could no doubt be much extended if more of the isolated chapels whose existence may be suspected could be reliably traced, but such conclusions as have here been drawn may fairly be considered safely based upon the statistics given; it only remains to see how any of these may bear upon the history of our chapel. A decline in popularity in the 15th century is now seen to accord with general considerations as well as with the archæological material, and a prosperous period lasting anyhow to the middle of the 14th century also fits reasonably well with both. The building of the later chapel before the end of the first quarter of the 12th century clearly belongs to the vigorous initial period of devotion to the patroness. The only question which remains is that of the early chapel.

The fact that before the later chapel was added its floor had already once been completely renewed certainly suggests pushing the date of the original building back anyhow beyond 1100. But this would make it earlier than the presumed date at which St. Catharine became known in England, and the possibility thus arises that the dedication was originally different. We have seen that St. Catharine's Chapel at Chale replaced an earlier hermitage of dedication different, if any, and unknown antiquity: we have seen reason to suspect the re-dedication to

1. The authority here is only *A-F*: e.g. *Liber Regis* gives no dedication. The church was appropriated to the Cistercian Abbey of St. Mary, founded by Henry I, and the modern church is St. Mary's.

2. It seems clear that the church of Eyton-upon-the-Wild-Moors (Salop), was originally All Saints', and the Chapel of Marazion (Cornwall) St. Ervetus', Ervan's, or Ermes': the original dedication of Melling Chapel (Lancs.) is wholly doubtful. Of the other dedications given by *A-F* as ancient, but here excluded from the text, Chiselhampton (Oxon.) dates only from the 18th century (formerly St. Mary), Wyville (Lincs.), from 1850. The Leigh Church (Glos.)was till 1885 St. James, though the south transept chapel (late 13th century) may have been originally St. Catharine's, as a statue of her (mutilated: apparently *c.* 1425-60) suggests.

St. Catharine of several parish churches in the 12th century and to believe that in the same century St. Catharine superseded St. Sampson of Dol at the rebuilding of the Saxon chapel near Milton Abbey. If now a similar change in dedication be assumed at the building of our later chapel, the date of the early chapel may certainly be pre-conquest. This possibility is attractive and it definitely cannot be disproved, but it is well to add certain cautions. The selection of a hill-top site, even though waterless, is comprehensible at once if the dedication were to St. Catharine, for it would recall the most striking incident in her legend, and the popularity of this idea is attested not only often in England but abroad (as notably outside Rouen) by the choosing of such sites for her chapels. But if the place was otherwise dedicated or not at all, the choice is harder to understand : at Chale the need of a beacon, at Milton the King's vision, supplying explanation enough, but here it can only be imagined.

On the other hand, if St. Catharine was patroness from the first, the early chapel can hardly have been over 25 years old at the outside before the later building was added. Now this is not as unlikely as it may sound, for as it was built on what was really a slope with a swallow-hole of sand at its lower end, and the original floor was not very firmly made up, there is nothing impossible in renewal being required in the course of a quarter of a century or even less. So while the question of a date before the Norman Conquest, or anyhow before the First Crusade, may be left open, such a theory requires coupling with that of a change in dedication at the building of the later chapel and has to forgo the readiest explanation of the choice of site ; whereas if the later chapel was added shortly before 1125 to a small oratory built in the extant name within a few years of 1099, it would be nothing extraordinary that the first really striking hill on the way from the sea to the capital of England should be the first spot on English soil to be hallowed to the new Saint of the returning Crusaders, Catharine of Mount Sinai.

PART THREE

SINCE THE REFORMATION

Aerii Catharina jugi quà vertice summo
Danorum veteres fossas, immania castra,
Et circumducti servat vestigia valli,
Wiccamicæ mos est pubi celebrare palæstras
Multiplices, passimque levi contendere lusu,
Festa dies quoties rediit, concessaque rite
Otia purpureoque rubentes lumine soles
Invitant tetricæ curas lenire Minervæ,
Librorumque moras et iniqua remittere pensa.

THOMAS WARTON,
Mons Catharinæ, ll. 1-9.
(Written between 1755 and 1760).

PART THREE
SINCE THE REFORMATION

THE ORIGIN AND EARLY HISTORY OF THE CONNEXION WITH WINCHESTER COLLEGE

THE whole story of the Hill in the Middle Ages has been the story of St. Catharine's Chapel. Nothing has appeared to suggest that in the 15th any more than in the three preceding centuries the place had an established importance in any other connexion. Yet Winchester College was founded in 1382 and opened in 1394, and generations of Wykehamists have counted among their most cherished traditions a prescriptive right to what is known among them as Hills. The claim was typically put by the Warden when in 1799 he protested to the Commander-in-Chief against its violation by soldiers bathing in the river below. "From time immemorial" wrote Dr. Huntingford, "a spot of ground called Catharine Hill, with the River and Field adjacent, has been appropriated to the Young Men educated at this College for the purposes of exercise, bathing, and recreation; and this appropriation is so well understood by the inhabitants of Winchester that they carefully avoid these premises, whenever it is possible for them to interrupt our Scholars."[1]

Hills was, of course, never College property, and we have no hint that it passed out of direct ecclesiastical management till the Prior of St. Swithun's leased it to Wriothesley in 1538: as Dean he renewed the lease in 1542, but there is no evidence of the prolongation or further renewal of the lease after Wriothesley's death in 1550. The bulk of the Chapel had by then, as we have seen, been destroyed at least ten years, and as the secondary occupation of the south transept was clearly for secular purposes[2] devised by Wriothesley during his leasehold, we need not suppose that it continued after his death and the falling in of the lease. After the middle of the 16th century,

1. Cook, p. 342.

2. It has indeed been suggested that this occupation was in fact a re-consecration of the least ruinous part of the Chapel under Mary between 1553 and 1558. But as the endowment had been suppressed by Wolsey and seven years later the oblations had ceased, there can have been no inducement for such an undertaking, which would certainly have made stir enough, had it been carried out, for some mention of it to have survived.

then, Hills was for the first time for over 400 years unoccupied and desecrated: the Chapel and its attached building was a mouldering heap, and the cemetery was only represented by its grass-grown ditch. On the summit there may, as we shall see, have been trees, which vanished later, and whether the northern slope was still in part under cultivation is doubtful, but broadly speaking, at the beginning of Elizabeth's reign Hills was what it has ever since remained.

And the first evidence that the College resorted there belongs to the year 1565.

Before elaborating the obvious inference as to when the practice began, we must consider what a number of Wykehamical writers have had to say for the popular idea that it is coeval with the foundation of the College. Poets like Roundell Palmer have gracefully assumed its truth, and Charles Wordsworth comments on his lines by asserting that the College procession to Hills was 'according to Statute.'[1]

But William of Wykeham's Statutes have no word to say of Hills. Adams, indeed, tried to supply an alternative authority by arguing [2] that *Tabula Legum*, which includes rules to be observed *Ad Montes*, dates from the foundation, but in fact it is certainly post-Reformation, as Cook [3] has shewn, and probably belongs to about 1570: indeed, the true issue of this argument is to strengthen the case for the 16th century origin of the resort to Hills.

The boys went to and from Hills two by two in procession, and Leach [4] finds it impossible to believe that the custom had not originally a religious significance. He discovers enough similarity to it in the Eton institution of *Montem* to argue that this was derived from the Winchester Hills when Eton was founded in 1440, and that the custom dates in each School from its foundation: but really the two seem always to have been widely different except in name, and there is no reason to suppose such a connexion between them. Anyhow *Montem* is not attested before 1560, and the case for its alleged religious origin is flimsy enough.[5] Both these conclusions hold good also for Hills, and each institution is most likely to date from the middle 16th century; if Leach's contention be granted

1. Roundell Palmer, *Lines on the 450th Anniversary of the Opening of the College*: Wordsworth, *College of St. Mary Winton* (1848), pp. 108, 110, 116: Cook, p. 343.
2. *Wykehamica*, p. 93, note.
3. Cook, Appendix VI, *cf.* p. 344: see further here below, p. 264.
4. *History of Winchester College*, p. 276.
5. Maxwell Lyte, *History of Eton College*, pp. 495-517.

that "no one could have invented *de novo* such an absurd custom" as the Eton *Montem*, this must be the date of the borrowing of the Winchester idea therein implied. But that is the most that can be said.

To say that Hills at Winchester began as a mediæval religious observance can only mean one thing, that the boys were sent in procession to attend St. Catharine's Chapel: the Saint's character as patroness of learning, and thus of schoolboys, lends force to this idea, and Leach finds it suggestive in his contention[1] that her hill "had an early importance for Wykehamists." This he ingeniously supports by adducing Warden Chandler's drawing of the College in about 1460. In the background of the left portion of this (fig. 30), between the east end of Chapel and the tall cross on the extreme left, probably Bubb's Cross at the end of St. John Street,[2] appears a clump of trees on a gently-rounded hill-top. The argument from this is as follows. This hill-top with its Clump is Hills: Chandler made a point of getting it on to his drawing "in spite of all geography": he must have thought his picture incomplete without it: this must be because it already had an importance for College as a resort for religious exercise. Now the presence of mediæval boundary-ditches round the Chapel, especially Ditch 2 (see pp. 229-30 above), makes it likely that it was wholly or partly surrounded by trees, and it is perfectly reasonable to suppose the hill on Chandler's drawing to be Hills, but there is really no need or warrant for further inference. Chandler's hill is quite near enough to the real position of Hills for a draughtsman with his standards of perspective: indeed, Kirby is quite content to say that it lies in the right direction, and there is no reason to think Chandler violated geography as he conceived it, still less that he did so with a purpose. He gives a still greater prominence to

FIG. 30.

1. *History of Winchester College*, pp. 185-6.
2. Kirby, *Arch.* 53, pt. 1, p. 229: M. R. James, Roxburghe Club edn. of Chandler MS. (1916), p. 18.

Bubb's Cross, which had nothing to do with College at all. And the chapel, resort to which is supposed to be the whole reason for his drawing the hill, is left out altogether, though we now know that it was a dominating building which would have given Chandler a fine chance for a characteristic piece of imposing exaggeration. And even if the eye of faith can see a corner of it in the indistinct pen-strokes where the trees on the hill disappear behind the east front of College Chapel, this must be owned a very poor way of indicating it to posterity as a building of Wykehamical importance.

But the weightiest argument against the theory that going on Hills was originally a religious exercise is the absence of all mention of it from the Statutes. If there is one side of College life which the Founder there organized in minute and comprehensive detail it is religious observance, and it is perfectly clear that he intended his Chapel,[1] with its three altars and its minimum of seven daily Masses, to be all-sufficient for the spiritual needs of the community; Sunday attendance at Cathedral only began after the Reformation, and when there were processions they were round Cloisters. Thus it is natural that the Statutes should ignore St. Catharine's Chapel, and it cannot be supposed that resort to it was without record introduced by some 15th century Warden.

If the hill in Chandler's drawing is indeed Hills, which need not be denied, he put it in naturally enough to decorate the landscape and with no ulterior motive.

In fact, the sole purpose known to us for College going on Hills is recreation, and there is no reason to suppose it was ever anything else. That Hills was so used from the time of the foundation has, indeed, been suggested: Kirby says: "Hills may have been the School playground from the very first, for none is provided by the Statutes, and it is not likely that Wykeham intended his poor scholars to be confined to Chamber Court altogether."[2]

But we have no right to father modern Public School spirit on the Founder; as Cook very properly observes, his Statutes only take account of youthful energy to repress it inside the College precincts, and also imply that a scholar should only very exceptionally go outside. He clearly regarded games as a nuisance which should have no place in the life of his Society,

1. See *Winchester College*, W.C.A.S., Appendix D.
2. *Annals of Winchester College*, p. 421.

and if during the 15th and early 16th centuries scholars were ever allowed outside the precincts to play, it can only have been an exceptional privilege, from which the Wardens must have been careful, as is the way of school authorities, to allow no precedent to develop. If there were such occasions, and leave was given to go as far as the downs, surely the last place which would have been appointed for such *incauti et inordinati ludi*[1] would be a hill which was occupied by a large chapel with the residence of its guardian and a cemetery[2] attached, and belonged to a manor under the control of the Prior of St. Swithun's. To sum up, it is equally unlikely that either for religious or secular purposes College resorted to Hills in the Middle Ages.

But when the troubled years of the Reformation were over and even such a stronghold of conservatism as the Wykehamical body was settling down into many new ways, the first mention of College games on Hills appears, associated with the Head Mastership of that most humane and lovable pedagogue, Christopher Johnson. His ten years as Head Master began in 1561 when he was at most twenty-six: he was a layman and a genius, and his generous sympathies and wide outlook shew him to be just the man who would be likely to relax the narrow bounds of Wykeham's statutable routine by making games and recreation a regular part of College life. And for a playground it would be natural for his choice to fall on Hills, which rises so pleasantly above the narrow valley, while its associations with the old religion were already no more than a memory in his own school-days.[3]

Thanks to the diligence of one of his pupils, the Themes or Latin exercises which he composed and dictated have survived: it is in them that we can learn so much about him and his times, and it is in one of them, apparently belonging to 1565, that the playground that he had probably himself instituted is first mentioned.[4] His subject is bravery and the perversity of rash boldness: he marvels that it is no new thing, despite the risk of detection and punishment, for boys to shirk games on Hills, work in School and worship in Chapel, and the still

1. Statutes, Rubric XLIII.

2. The cemetery must have been new about the time College was founded, if the evidence from the excavations in Ditch 1 be allowable: see above, pp. 228-9.

3. Johnson was elected *ad Winton* in 1549.

4. The pupil was William Badger, and his notebook, entitled *Themes at Winchester School*, is in the British Museum (Add. MSS. 4379): the passage cited is from fol. 138 *b*. For the authorities for its authenticity, and for a delightful character-sketch of Johnson, see Cook, pp. 42-3.

more frequent occurrence of illicit games in School, idling on Hills and tumult in Chapel, makes him fear that disorder among schoolboys is as inevitable as heresy in the Church.[1] From this playful homily we thus learn that in 1565 recreation on Hills was as regular a thing as school work and Chapel, but that some boys occasionally shirked it, and the zeal of others for exertion sometimes flagged. If Johnson had established the custom early in his tenure of office, say in 1561 or 2, he would naturally speak of it a few years later as a fixed institution, while in a school where the Founder's unathletic tradition had been unbroken for nearly two centuries, public opinion would still need time to settle down after the innovation. When this had happened, as before Johnson retired no doubt it had, there is no need to believe the institution was unpopular: such an inference, as Cook remarks, is by no means to be drawn from the fact that its history begins, as we shall find it ending, with shirking.[2] For a good two hundred years Hills was, as he says, practically the Wykehamist's only playground, and the affection it has inspired is to-day, long after the institution of the present playing-fields, deeply enshrined in Wykehamical sentiment.

The rules prescribed for observance on the way to Hills in *Tabula Legum*, almost certainly also composed by Johnson, probably about 1570, apply also to going 'up town'—no doubt a rare excursion in those days: all must walk with a companion, behave decently, bow the knee and bare the head when meeting masters and superiors, and preserve in all ways an orderly demeanour.[3] That these were not always strictly observed could be guessed even without the evidence of a protest from

1. The full text is as follows :—

Quũ alia in diſcentibus mirari ſoleo, tum illud maxi | mè unde ſibi tantum audent (*sic*), fumere, ut in quo | ſũum esse periculum vident, ab eo non abſtineãt ne | deprehenſi quidem, ac ſepius caſtigati. multa ſunt qui (*sic*) | intelliguntur hoc loco. nam et ā montibus abeſſe ali | quos cum luditur, et ā ſchola cum studetur, et ā | templo cum feriatur, nequê novũ eſt, et quoad poteſt | fieri minimè impunitum. iiſdem in locis turbationes eſſe | id verò multo eſt frequentius. nam et in ſchola | luditur, et in montibus ceſſatur, et in templo tu | multuatur interdum, ut vereor ne quẽadmodum | in eccleſia dei hæreses ita in diſcentium | grege ἀταξίας eſſe neceſſe ſit

2. Cook, p. 347.

3. The text of this section of the *Tabula* in its original form is :—

IN OPPIDO. AD MONTES.
Sociati omnes incedunto.
Modestiam prae se ferunto.
Magistris ac obviis honestioribus
Genua flectuntor,
Capita aperiuntor.
Vultus, gestus, incessus
Componuntor.

For the 18th century revision see below, p. 284.

Bishop Horne in 1571[1] against 'ranging abroad . . . . in the fields when they go to play,' but doubtless the order kept was reasonable enough.

The whole proceeding is pleasingly narrated in Robert Mathew's descriptive poem, *De Collegio Wintoniensi*,[2] written in 1647 during the author's last months in the School. On Tuesdays and Thursdays, which were 'remedies' regularly granted by the Head Master's bestowal of the symbolic 'remedy-ring,' the boys did not remain in School in the early morning, but when the ring had been granted assembled, præfects on the right, inferiors on the left, at Middle Gate, where the Præfect of Hall called names. They then marched out, under his superintendence, two and two, along College Walk, over Blackbridge, along the path beside River and past Tunbridge up to the *apex* of Hills, where the procession disbanded and the whole hill-top was free for games within the encircling ring of Trench, *i.e.* the Early Iron Age earthwork, about whose origin the poet shews no curiosity. Lying about on the ground was forbidden for fear of 'fevers'—we may add, on nearly contemporary authority,[3] on pain of punishment.

Of the games played Mathew mentions quoits, hand-ball, bat-ball and football, and speaks of others which he will not describe. Quoits and a game called Auly-auly, which may have resembled Mathew's hand-ball, were still popular in the 19th century on Grass Court: the relation of his bat-ball to cricket is open to conjecture, though his words [4] rather suggest a sort of tennis played with a weapon like the long-bat till 1927 used for bat-fives on Ball-court. His football was no doubt a primitive form of the traditional Winchester game,[5] though we hear nothing of the enormous 'hot' which was its principal feature when we met it in the 18th century. How far any such games were already current before Hills was instituted it is impossible to say: such echoes of College life towards the end of the 15th century as may exist in the *Vulgaria* of William Horman (Head Master 1495 - 1501) suggests that football, 'tenys' and wrestling were then not unknown,[6] and it has been conjectured from the narrow oblong shape required for

1. Cook, p. 352.
2. ll. 134-170: Cook, pp. 20-23, with ch. XXVII.
3. That of Joseph Godwin, admitted scholar 1648: Cook, pp. 301, 325, 348.
4. "sive per auras Sæpe repercusso pila te iuvat icta bacillo" (ll. 159-60).
5. The writer in *Winchester College*, W.C.A.S., p. 45, states his belief that the game was from its beginning played on Hills: this view seems far more probable than the suggestions here noticed in the next paragraph.
6. Cook, pp. 38-9.

the ground it is played on that Winchester football originated in Outer Court, or even in College Street: however this may be (and the latter suggestion anyhow is scarcely plausible), games in the College precincts, if played at all, must have been connived at rather than established, and it was the institution of Hills alone that enabled them to develop.

The morning procession to Hills that Mathew describes must have started soon after six,[1] and the boys were breakfastless: at nine the præfect called "Domum" and they returned as they had come—the poet's hint (l. 165) about straggling recalls the Bishop's protest noticed above—to the first meal of the day at last (ll. 213-15). Thus ended what has always been known as 'Morning Hills.' After work dinner followed about noon (ll. 224-5) and on the same 'remedies' there ensued what was later called 'Middle Hills,' which was a repetition of the same programme, lasting till three. 'Evening Hills,' with the bathing it implied, was a later institution and will be noticed below (p. 281).

Fig. 31.
Stamps on clay pipes.

This, if weather permitted (*cf.* ll. 134, 179), was the routine of a normal 17th century 'remedy' all the year round: the poet's only hint of variation is that if it was very hot, leave might be given to go under the trees in Meads, but this was clearly exceptional (ll. 175-6).

All this time it should not be forgotten that Hills must have been a regular resort of the citizens of Winchester, as it is to-day, though the habit grew up of respecting the hours during which the School was there. To their visits may be attributed some 17th century Bellarmine ware found near the Chapel site and the farthing token noticed and illustrated above (p. 244: pl. XVI, 5). Some also of the clay tobacco-pipes found may be dated before about the middle of the 17th century, as their form shews: three of these are stamped on the heel with

1 *cf.* l. 59, with ll. 134 ff.

the maker's mark and are here illustrated (fig. 31). The legends are WB, in heart-shaped frame, ... SIM, and (I)OHN PAUL: for the first *cf.* Hilton Price, *Arch. Journ.* LVII (1900), p. 231, fig. 5, and p. 233, fig. 12, where the evidence for dating will be found: pipes of the later 17th and 18th centuries, as well as more modern examples, also occurred, and no doubt the more daring spirits among the College men were responsible for some of these at every period, as they certainly were in the 19th century.[1]

In fact, it may be that we have here a tangible comment on Mathew's hint that in his account of the pastimes enjoyed on Hills he has only mentioned those of the 'innocuous,' and not all even of them.[2] Whatever it may be now, there is no need to suppose that the Public School attitude to smoking was substantially different in Mathew's day or even earlier from what it was a century and a half or two centuries later.

One other matter belonging to the 17th century remains to be noticed. We have seen that in the 15th century trees quite probably stood around the Chapel: if Ditch 2 was part of their boundary-ditch, they formed a much larger clump than that standing to-day. But later on this clump disappeared. In Speed's map of 1611, 'S. Kathrens hill' is shewn (see inset to fig. 1 above) with three sparse trees on its summit, in a manner which suggests that the presumed 15th century clump had dwindled: perhaps Wriothesley had felled some timber. Indeed, the exact number of Speed's trees cannot be used as evidence: they are perhaps hardly more than a conventional sign that a clump existed, whatever its size, and since he puts his 'S. Kathrens hill' where St. Giles's Hill ought to be, as is clear from the lie of the adjacent roads, his testimony should possibly be discounted.

But Mathew's poem, which describes Hills without a word of trees, may fairly be considered negative evidence for 1647, and Hills was definitely treeless before the end of the century, as the oil painting shews which hangs in the Warden's dining room and dates from about 1692: fig. 32 is a drawing from this picture, which Cook has reproduced as his frontispiece.

1. See p. 283 below.
2. See p. 265 above. The reference is to ll. 161-3:

"his lusibus uti
Innocuis fas est; fas est his lusibus uti,
Lusibus atque aliis, quos iam praescribere nolo."

The story of the present Clump will appear in due course: meanwhile Mathew has given us what is no doubt a reliable enough picture of the Wykehamical institution of Hills as it was for about the first century and a half of its existence, and the new features that appear in the tradition with the 18th century require treatment in a fresh section.

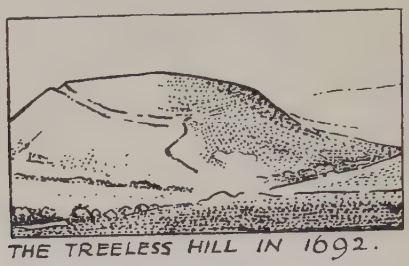


FIG. 32.
From an oil painting in the Warden's Lodgings at Winchester College.

LABYRINTH AND THE LEGEND OF 'DULCE DOMUM'

Perhaps the most striking omission in Mathew's account of Hills is the square turf-cut maze, sometimes called 'the Mizmaze' by the townsfolk, but in the School known always as 'Labyrinth,' which lies on the flat crown of the Hill between the Chapel site and the prehistoric Entrance (see fig. 36). The College tradition of treading this maze was established by the end of the 18th century as of legendary antiquity, and while we have seen no reason to believe it could have begun before the Reformation, it might be supposed anyhow to date from the time of Christopher Johnson. But if Labyrinth existed and the custom was current in Mathew's time, it is most extraordinary that this should be one of the pastimes which he declines to describe (l. 163), for we shall find that antiquaries loved to trace a connexion between the treading of such mazes and the game played by Iulus and his companions in the Vth book of the Aeneid,[1] and for a poet with Mathew's delight in classical allusion to pass over such a golden opportunity for some pregnant hexameters is so surprising as to suggest that in 1647 Labyrinth did not yet exist at all. It certainly could not then have had the importance in Wykehamical story that it has had during the known period of its existence.

In fact the earliest positive evidence for it is the plan discussed and reproduced below as fig. 33, which is dated 1710, and it is thus natural to presume that it was cut between Mathew's time and that date. However, it has often been argued or assumed to be earlier, and as the case for this can only be based on certain theories about mazes in general, we must see whether they are strong enough to outweigh the negative testimony of Mathew.

There are in England a number of such turf mazes,[2] and the idea that they are ecclesiastical products of the Middle Ages is suggested by the proximity of some of them to sacred buildings. There is a maze by St. Martha's near Guildford, a 12th century hill-top chapel which closely resembles our St. Catharine's, and the maze at Sneinton (Notts) lay also on a hill-top near a well and chapel of St. Anne, built in 1409 and a place of pilgrimage, while that at Alkborough (Lincs.) is close to the site of a Benedictine monastery, and the Boughton Green

1. ll. 545-603. See further below, pp. 270, 272-3.
2. The modern work to be consulted is W. H. Matthews' *Mazes and Labyrinths* (1922).

maze (Northants) adjoins a ruined church of St. John the Baptist and is said to have been the origin of the fair started there in 1353. The Alkborough maze is also near the parish church, and so is the one at Wing (Rutland). The further observation that the plans of these and other English turf mazes correspond in a number of cases to those of mosaic labyrinths in certain Continental churches and cathedrals, led Edward Trollope to argue, in his *Notices of Ancient and Mediæval Labyrinths*,[1] that "some of these works may have been originally created as a means of performing penance, ... and that they were designed by ecclesiastics" (p. 228). As this theory would of course bring our Labyrinth into connexion with the Chapel, the case for such a mediæval association must be reviewed.

It is no doubt in folk-dancing that the origin of mazes should be sought: the myths of the Cretan Labyrinth, of Theseus there slaying the Minotaur, and of his festival dance at Delos, of Ariadne's thread, and of the dance devised for her by Daedalus, seem to have crystallized round the immemorial ceremonial of following a leader in 'mazy dances.' Such dances were presumably also the origin of the ancient maze-game of the *lusus troiae* or 'game of turnings'; this appears in Italy, as depicted, for instance, on an Etruscan vase inscribed TRUIA, as a martial exercise; it was afterwards by popular etymology connected with the penetration of the defences of Troy or the wanderings of the Greeks after the Trojan War, and was immortalized by Virgil. The Labyrinth itself (the name is apparently pre-Hellenic) appears early on coins of Cnossos, and later became throughout the Græco-Roman world a favourite decorative design, particularly on Roman mosaic pavements, as at Pompeii.

The earlier centuries of Christianity were marked by a strong taste for allegory, and the labyrinth design, with its mythological significance, was taken over by the Church and invested with a mystic religious meaning. In an early Christian basilica, for instance, found at Orléansville in Algeria, the design appears on a mosaic pavement, with a pattern made of the words SANCTA ECCLESIA in the centre replacing the pagan Minotaur.[2] Similar designs occur in ancient churches in Italy and France, belonging particularly to the 12th and 13th centuries. The symbolism is of the Church as the ark of salvation only to

1. *Arch. Journ.* XV (1858), pp. 216-235.

2. Trollope, *op. cit.* p. 219: Matthews, *op. cit.* p. 69, is definitely wrong to state that no labyrinths occur with distinctively Christian symbols.

be reached through the tortuosities of sin by the Ariadne-thread of Divine grace, and thus of the Christian's pilgrimage, combining the ideas of Christ's pilgrimage to Calvary, our earthly journey to the heavenly Jerusalem, and the actual pilgrimage to the earthly Jerusalem. This last notion explains the prevalence of Church labyrinths in the crusading period of the 12th and 13th centuries. Trollope gives Continental examples as in Lucca Cathedral, in Rome at Santa Maria in Aquiro and Santa Maria in Trastevere, at Ravenna in San Vitale, at Pavia in San Michele, at Aix-en-Provence, St. Quentin, the cathedrals of Amiens, Arras, Bayeux, Chartres, Rheims, and Sens, and the Abbey Church of St. Bertin at St. Omer. He gives evidence (not, however, earlier than the 18th century [1]) that these were called *Chemins de Jérusalem*, and states that they were used as "instruments of performing penance for non-fulfilment of vows of pilgrimage to the Holy Land," and "as a means of penance for sins of omission and commission in general; penitents being ordered to follow out all the sinuous courses of these labyrinths upon their hands and knees, to repeat so many prayers at fixed stations, and others when they reached the central *Ciel*." It seems, however, that these statements can be traced no further back than the early 19th century French antiquary Wallet, and though there is no doubt about the pilgrimage symbolism in the name *Chemin de Jérusalem*, it is going too far to suppose that these church labyrinths played so important a part in the life of mediæval Christendom. No doubt some pious folk trod them daily, but they were probably far more often trodden merely as a semi-devotional pastime: in all the literature of mediæval piety no allusion has been discovered [2] to their use for penance or as a substitute for a genuine pilgrimage.

Now while there are apparently no turf-cut out-of-door mazes abroad, there are no indoor church mazes in England, and this fact, coupled with the resemblance in plan between English turf-cut examples like the Alkborough maze and that, for instance, in Sens Cathedral, led Trollope to suppose that the turf mazes were the English counterpart of the church mazes abroad. But this is no more than a theory. There is no positive evidence for the association of any English maze with the old

1. *Op. cit.* p. 221.

2. In the researches of either Trollope or Matthews: nor are any known to Dr. G. G. Coulton or Dr. M. R James, who have both been kind enough to write on the subject to the present author.

religion. The only definitely dated example is at Hilton (Hunts), which as its central obelisk records was cut by William Sparrow in 1660. No doubt this is later than a great many: Aubrey in the 17th century observed [1] that there were many mazes in England before the Civil Wars, and that the young people used to dance upon them, or as the term was to tread them, and Sparrow must have cut his maze to celebrate the removal of the Puritan ban on such merry-making under the Commonwealth. In fact the existence of mazes in mediæval England may confidently be assumed, but it must always have been with rustic sports and not with mystical piety that they had to do.

Indeed, the very fact that indoor church mazes were never introduced into England argues that the devotional use of the labyrinth remained a foreign one, and we have seen that even abroad its prevalence has probably been exaggerated by modern writers. Shakespeare could hardly have spoken of mazes as he did [2] had they been scarcely more than 50 years earlier penitential devices of the Church. They are as clearly native to the English country as the nine men's morris or the fairy-tales of Robin Goodfellow himself.

It is said [3] that on the Cumberland shore of the Solway mazes have been from time immemorial cut by herdsmen, and by shepherds also in Wales, and as well as such names as Mizmaze and The Mazles we find both at Sneinton and Boughton Green the mazes were called Shepherd's Race. And there is evidence of the great antiquity of the name. By the 12th century the old 'game of Troy,' whose ancient Italian history has been noticed already, had been introduced into England: it had no doubt been kept alive or re-born in the early Middle Ages under the influence of Virgil: Fitzstephen describes the youths of London sallying out to play it on horseback, and it played some part in the origin of the tournament, while itself lasting on through mediæval times [4]: it assimilated the ancient maze-games of the countryside, so that we find mazes called in

1. *History of Surrey* V, p. 80.

2. *Midsummer Night's Dream*, II, i, 199-200:—

> *Titania.* . . . . And the quaint mazes in the wanton green
> For lack of tread are indistinguishable.

Tempest, III, iii, 2-3:—

> *Gonzalo.* . . . . Here's a maze trod indeed
> Through forth-rights and meanders!

ib. V, i, 242: *Alonso.* This is as strange a maze as e'er men trod.

3. *Notes and Queries*, ser. II, vol. V, p. 211.

4. Strutt, *Sports and Pastimes* (ed. J. C. Cox, 1903), pp. 113-14.

England Walls of Troy, as in Holderness, and Troy-town, like those of the Cumberland shepherds, or at Pimperne (Dorset) or Somerton (Oxon.), while the Welsh called them Caerdroia, and invented an allusion to the fabled Trojan origin of the Britons and their King Brute. Side by side with these exist names recalling Iulus and his playing of the game in Virgil's lines, such as July Park, Julian's Arbour, Juliberry's Grave, Julaber's Barrow (near Chilham, Kent), and Julian's Bower (at Alkborough and Horncastle, Lincs.). The simple name of Shepherd's Race must stand before English folklore was invaded by these echoes of the *Aeneid*, which themselves became well established during the Middle Ages, and lasted to become the delight of Renaissance and later antiquaries.

We have seen that mazes kept their popularity at least as late as the Civil Wars, and from the 15th century they attained elegance in the form of the topiary labyrinths that were so fashionable under the Tudors and early Stuarts, formed by lanes between formally clipped hedges or rows of shrubs. The Theobalds and Hampton Court mazes are known to everyone, and they bore the same relation to the turf-cut mazes of the countryside as the very similar ingenuities of Pliny's garden did to the country field mazes of contemporary Italian children. And the country mazes of England survived the rigour of the Puritans, just as the maypole and the jack-in-the-green did. We have already seen how William Sparrow must have cut his maze at Hilton to celebrate the Restoration. The famous maze at Saffron Walden (Essex) was worn with use and duly re-cut in 1699, and has since been renewed five times, and it is only the great development of ball games mainly in the 19th century that has tended at last to oust this and other sports of the village green, though indeed our Labyrinth is to-day by no means neglected.

To return to the question of its date: it now appears that though there were many mazes in mediæval England, later examples may occur, and we have no special need to ascribe this one to the Middle Ages. The presence of the chapel and graveyard adjoining is no argument for a pre-Reformation date. It has no name to suggest association with the mediæval 'game of Troy.' Its alignment with the mediæval Ditch 1 cannot be used to suggest that it was contemporary with it: the ditch would at any time make a very convenient base-line for the complicated business of laying it out. In fact, no consideration

concerning mazes in general can be brought forward to oppose the strong argument from Mathew's silence that it dates from later than 1647.

But it was in existence in 1710, and the plan (fig. 33) which establishes this fact for us must now be considered. It shews that, like the Saffron Walden maze but unlike most others, it consisted then, as it does now, of a narrow winding channel

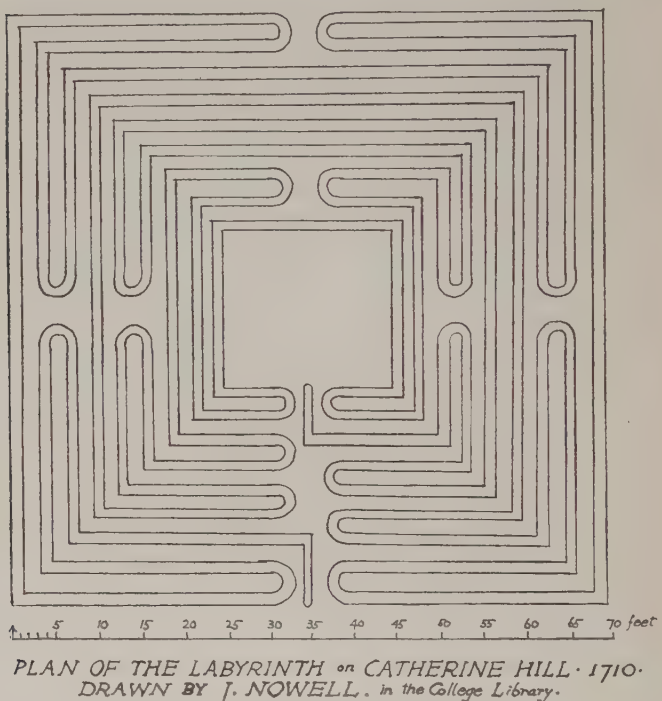

5 10 15 20 25 30 35 40 45 50 55 60 65 70 feet
PLAN OF THE LABYRINTH on CATHERINE HILL · 1710 ·
DRAWN BY J. NOWELL. in the College Library.

FIG. 33.
The earliest known plan of Labyrinth.

cut in the turf, and not of a band of turf demarcated by a cut border. The length of its side, however, 70 ft., is 16 ft. less than it is to-day: the 19th century re-cutting which was the occasion of this change will be noticed in due course. The plan belongs to College, and was presented to Moberly Library by the Rev. H. J. Wickham, formerly a housemaster. It is signed 'J. Nowell,' and in view of the persistent tradition that

Labyrinth was the work of a Wykehamist, it is curious to find that in 1710 a boy called Nowell appears in the Long Roll of the School, as a Commoner in Fifth Book.[1] It would be very rash, however, to identify this Nowell with the author of the plan. He does not appear as a Commoner in any subsequent year, but in 1711 the Register of Scholars shews that a William Noel was admitted into College senior on the Election Roll, as Founder's Kin, having been elected at Michaelmas the previous year.[2] This Noel, who belonged to a Leicestershire family who were not really Founder's Kin at all, is probably identical with the Commoner Nowell of 1710. At that period and later commoners frequently stood for College and were elected: they had the advantage of being known to some at least of the electors. When a commoner on one Long Roll does not reappear subsequently as such, but a scholar of the same surname, however spelt, appears for the first time in the ensuing year, the two may in default of contrary evidence reasonably be considered identical.[3] In fact, the existence of the plan and its date form the only case for believing the commoner of 1710 to be its author J. Nowell and not the next year's scholar William Noel, and the plan itself does not look like the work of a schoolboy. It appears to have been drawn by someone with a trained hand, perhaps a surveyor or surveyor's clerk. It has not been possible to trace any such likely person of the name, but there was apparently a Nowell family in Winchester at the time, if the marriage of Anne Nowell of the City of Winchester to Thomas Guerny of the Soke be accepted as evidence, for it took place in the Cathedral on September 1st, 1715.

The plan therefore gives us no evidence concerning the origin of Labyrinth: it only tells us that in 1710 it was existing in the form shewn, and that some fairly skilled person thought it worth mapping. And it affords no reason for connecting the maze with the School; in fact, the earliest evidence for such a connexion appears over half a century later, and against it there is negative testimony from the intervening period.

However, the Wykehamical legend of 'Dulce Domum' and its author has at this point to be reckoned with. In its full

1. *Winchester Long Rolls*, 1653 - 1721, ed. C. W. Holgate, p. 122.

2. This information and the comments which follow are due to the kindness of Mr. Herbert Chitty, Keeper of Archives of the College.

3. Where Long Rolls for both the years concerned are extant, the question of identification is clarified by the relative position in the School of the name on each: in this case however, we have no Long Roll for 1711, and by 1712 William Noel had clearly left, as he is described when admitted a pensioner of Pembroke College, Cambridge, in May 1713, as coming from Mr. John Hunter's School, Lichfield.

form this legend is as follows. A certain boy was condemned for some misdemeanour to be kept behind in College during the Whitsuntide holidays: he was chained to a tree near the river bank below Blackbridge, on which he carved the verses of the song he composed in his captivity, and, thereafter pining away, died on the day of his schoolfellows' return to College; he is also said to have roamed, presumably during intervals in his bondage, on Hills, where to while away the time he devised and cut Labyrinth and also the cross called 'Domum Cross,' and used to gaze on the scene of his former joys from the northern corner of Trench, hence called 'Misery Corner.' It is also said that he drowned himself in the river.

Now the tune of 'Dulce Domum' is fairly reliably ascribed to John Reading, the College organist from 1681-92, and Cook has reasonably argued [1] that the words are very little older. A letter of 1682 [2] attests the fact that detention during the holidays was then a punishment sometimes inflicted, and if the verses be thought fit to be ascribed to a schoolboy, the main assertion of the tale may be accepted. The breaking-up ceremony of singing the song round the traditional 'Domum Tree' was certainly established by the middle of the 18th century,[3] and though the supposed poet could hardly have been chained to it [4] he may well have carved his lines on it, or at least composed them under it, else there would be nothing to bring the tree into the story. But though the Domum legend begins to appear in print in the third quarter of the 18th century, it is not till 1798, when Milner's *History of Winchester* appeared, that Labyrinth, or indeed Hills at all, comes to be connected with it.

Between 1755 and 1760 Tom Warton, the future Laureate, then an Oxford don, and from 1757 Professor of Poetry, wrote a Latin hexameter poem entitled *Mons Catharinæ*.[5] He was not a Wykehamist, but his elder brother Joseph was in College 1735-40, Second Master 1755-62, and thereafter Head Master: he habitually spent his Long Vacation with him, haunted College, and as this and other poems shew, was thoroughly conversant with the School. Indeed, as early as 1750 he was familiar enough with Winchester to write and publish a *Description*

1 Pp. 409-10.

2. Of Ralph Verney, quoted by Cook, pp. 411, 428.

3. See Cook, pp. 412-13.

4. Adams, *Wykehamica*, p. 411, suggests he was chained to his chamber-post on the breaking-up morning.

5. In Charles Wordsworth's anthology, *College of St. Mary Winton* (1848): see Wordsworth's introductory note there (p. 94) for the circumstances of its composition.

of its *History and Antiquities*. The opening lines of his poem are printed above: he goes on to describe Hills and the doings of the boys upon it in detail, and he devotes seven lines (ll. 58-64) to Labyrinth. Some boys, he says, tread it, but its origin is unknown: perhaps fairies (' Lemures ') or a love-sick shepherd cut it. Of Dulce Domum and its author he says no word. Now Warton knew many Wykehamists, whose memories must have gone back to about the beginning of the century,[1] and his ignorance suggests very forcibly that there was no Wykehamical tradition about Labyrinth towards 1700, and certainly nothing to connect it with Dulce Domum. That Labyrinth should have been cut by a boy after 1647 in his School's only playground and the fact forgotten, despite its popularity, in roughly 50 years or less, is most unlikely in such a storehouse of tradition as Winchester College, and it is thus a very reasonable presumption that it was cut by somebody quite unconnected with the School.

Later, however, the School claimed it for its own. An anonymous Wykehamist who was in College from 1768 or a little earlier,[2] wrote three articles of reminiscences in *Wheeler's Hampshire Magazine* for 1828 (pp. 305-6, 354-5, 555-6): in the first he describes the Dulce Domum ceremony, without a word of Hills, in the second Hills, without a word of Domum; the maze, he says, is ' famous in Wiccamical story,' and is said to have been cut ' by a College boy.' This marks the first stage in the growth of the legend: within a decade or rather more from 1760 Labyrinth, previously unexplained, was attributed to a Wykehamical hand. The next stage was to be the ascription of that hand to the author of Domum.

The writer states that in his time boys ran out the maze as a race, and he also gives the traditional date for the boy's cutting of it as about 1710. This date is highly suspicious: such traditions very rarely preserve the suggestion of an exact date. The writer was clearly a Hampshire, perhaps a Winchester man, and it looks very much as if he had seen Nowell's plan and grafted its date on to his version of the tradition as the date

1. For instance, the Head Master, Dr. Burton, entered College 1705, and Warden Coxed (died 1757) in 1710.

2. He mentions (p. 555) as a contemporary the drowned scholar commemorated in Cloisters by the inscription *Sicut Flos Agelli*: this was John Bingham, admitted 1763, drowned 1768 (Kirby, *Winchester Scholars*, p. 258), but he must himself have been considerably younger. He had left before 1780-1, for (pp. 555-6) he frequented Cloisters, which were from that time closed to the boys, and while he must thus have been at least 65 in 1828, he is not likely to have been much over 70, else his allusion (p. 305) to his boyhood as ' 30 or 40 years ago ' would be stretching the point even further than it actually must. His dates may be reasonably guessed as *c.* 1767 - 1775.

when Labyrinth was cut. Nowell was no doubt a Winchester man, and the family of Wickham, the ultimate donor of the plan to Moberly Library, had lived there for three generations: probably the document has never left the City. At least the date as given by the anonymous author merits scepticism.

However, his reminiscences are at any rate untainted with the Domum legend, which properly speaking has nothing to do with Hills at all.

Not twenty years from his school-days were needed to involve Labyrinth, and no doubt also Domum Cross and Misery Corner, in the myth. Winchester in the 18th century was indeed 'a school of poets.'[1] Milner says in 1798[2]: "The fabled origin of this Dædalean work is connected with that of the Dulce Domum song," and thereafter the tale suffers no abatement.

He also says that it "is always kept entire by the coursing of the sportive youth through its meanderings," and as late as 1829 Mr. Britton[3] testifies to "the continued coursings of the students of Winchester College, who daily thread its mazes in the full spirit of diversion and exercise." But the practice was dying out. The passage quoted should have been cut out of the 1839 edition of Milner's work, for 'tolling Labyrinth' was (and is) poor sport compared with Winchester football, which during the first quarter of the 19th century grew rapidly in popularity and importance, so that when Warden Barter was elected to office in 1832 he found it an established institution to play 'long game' over the site of Labyrinth, which must have been practically obliterated and certainly disused.

He had it re-cut, and thereby considerably annoyed the School,[4] who continued to disdain it. A MS. 'Notion Book' of 1842[5] says: "it is fast going to ruin," and in 1846 Moody[6] writes of the "traces of the once famed mizmaze, which the collegians formerly felt a pride in preserving, but which is now neglected, filled up, and almost forgotten.' Dr. Fearon, who was in College 1852-59, makes it clear that he only "endeavoured to solve the mysteries of labyrinth" when he was "at his wits' end to know what to do."[7]

1. Leach, *History of Winchester College*, ch. XXV.
2. *History of Winchester*, ed. I, vol. II, p. 155.
3. *Historical and Descriptive Guide to the City of Winchester*, p. 87.
4. Adams, *Wykehamica*, p. 295.
5. By R. Gordon (COLL. 1837 - 43).
6. *Sketches of Hampshire*, p. 72.
7. *The Passing of Old Winchester*, p. 36.

But Barter's re-cutting was an event of importance because of the alterations it involved. The old outline could scarcely if at all be traced, and Edward Trollope, who had four cousins in College at various times and was himself in a position to get direct information,[1] states in the paper of 1858 above quoted[2] that the Warden proceeded "with the aid of a plan that had

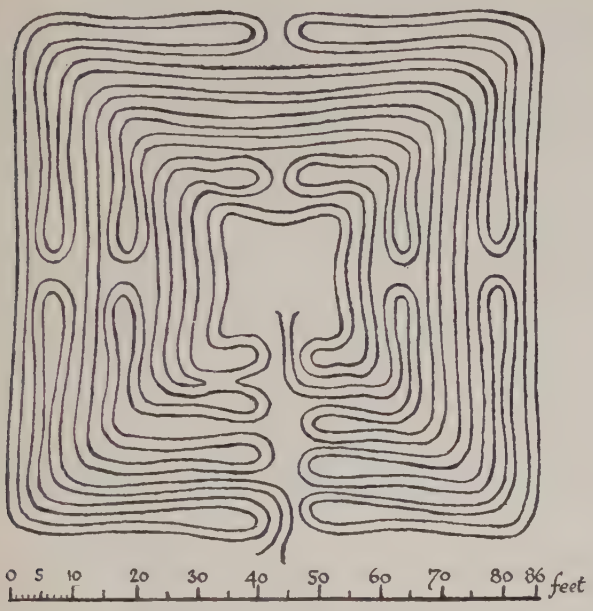


FIG. 34.
Plan of Labyrinth in 1929.

been fortunately preserved by a lady in the vicinity." This suggests that the plan was Nowell's, which we have before suspected to have been 'in the vicinity,' perhaps already in the hands of the Wickham family, but if so, its aid was turned to indifferent account. For as comparison of figs. 33 and 34 shews, while the general plan remains the same, the side of the square is now 86 instead of 70 ft. and an appreciable curve has

1. *i.e.* from Barter himself. He was anyhow a friend of the Rev. W. H. Gunner, of Blackbridge House, Winchester (scholar from 1824), an enthusiastic and knowledgeable Wykehamist, who till his death in 1859 was, like Trollope, a prominent member of the Archæological Institute, and also of course intimate with Barter.

2. p. 226.

been given to stretches of path which in Nowell's plan are perfectly straight.

It seems that it was not till about 1880 or soon after, when the old institution of 'Hills' had been abolished as will shortly be seen, that 'tolling Labyrinth' was re-introduced as part of the annual ordeal for new boys known as 'doing Hills.' As shewn in fig. 34, a cutting, clearly not part of the original design, has been made presumably since that date, by which two adjoining stretches of path have been made to run together. Unwary feet can thus by crossing from one to the other inadvertently begin to retrace their steps. This innovation has made the maze what it never was before, a real puzzle: formerly it only provided the excitement of a rather peculiar race, but as it is it becomes bewildering enough, whether following the College custom you start inside and run outwards, or as the townsfolk do, no doubt more correctly, you try from the outside to reach the centre. In either tradition, its popularity seems at present securely established.[1] Its actual condition is reasonably good, the mean level being very slightly lower than that of the surrounding turf, which is barely noticeably banked up. If at all, indeed, it seems more likely to suffer from excessive wear than from neglect.

1. The present writers, whom the work of excavation kept on the Hill all day for four successive months of August, very rarely saw Labyrinth without someone attempting to trace it, and often there was quite a crowd. In fact, on one occasion they saw the interesting sight of a man pursuing its windings on a motor-bicycle!

Fig. 35.

THE EIGHTEENTH AND NINETEENTH CENTURIES: CONCLUSION

Labyrinth and its associations have of necessity been dealt with separately, and the due sequence of history may now be resumed at the beginning of the 18th century. The School routine of going on Hills seems after Mathew's time to have suffered only two important innovations before Warton described it between 1755 and 1760. Commoners were added to the regular procession of College men no doubt under Dr. Burton, who established them on what was really a new footing between 1739 and 1742 with the institution of their quarters in 'Old Commoners.' And some time within the same half-century the morning and afternoon excursions to Hills on Remedies were supplemented by 'Evening Hills,' which took place daily in the summer between the evening meal and 8 o'clock. At 'Evening Hills' the hill was not climbed, for the purpose was nothing but bathing at various recognized places in the Itchen beneath it.

Warton describes the procession, the confinement of the majority in the morning and afternoon within the ring of Trench (which he ascribes to the Danes), the contemporary form of Winchester football played on the summit, the bathing at Evening Hills, the ranging over the surrounding country permitted to Præfects and their friends, with the illicit pleasures it afforded, and various other pastimes including wrestling and 'tolling Labyrinth.' He goes on to commend the boy who seeks the top of the *tumulus* and enjoys the view. The prospect he expatiates upon from the mound which actually covered the ruins of the Chapel is an unbroken one, and it is clear that in his day, as in 1692, there was no clump of trees on this spot.

In fact the clump was planted soon after he wrote, and the event was an incident of the Seven Years' War which interrupted the history of Hills as a School playground. In September 1778 George III and Queen Charlotte visited Winchester.[1] On the 30th they were received in College 'Ad Portas,' and after that ceremony were conducted by way of School ("whose just proportions and elegance of the roof His Majesty much admired") into Meads. Here "the King was struck with the view of the plantation on Catherine hill, and was much pleased when he was told that it was compleated *in one day*[2] by Lord Botetourt, during the last encampment of the Militia, when he was Colonel of the Gloucestershire."

The planting came about in this way. In 1756 the fear of a French invasion led the Government to bring over 10,000 Hessian troops and encamp them on the downs round Winchester.[3] In 1759 Pitt's administration replaced them by detachments of the English County Militia, thereby earning much patriotic approval. In the winter the troops were quartered in the City, and their summer camp occupied a triangle of ground between the Andover and Basingstoke roads, which is now cut in half by the railway.[4] The Gloucestershire Militia was present in 1760[5] and 1761,[6] under Colonel Norborne Berkeley, who in 1764 became Lord Botetourt, and continued in command till 1765, and as the Militia was disembodied at the Peace of Paris in February 1763, he must have set his men to plant the trees during the summer encampment of 1762, which would in 1778 be called 'the last.' One may suppose that he did it for a wager.

Adams has asserted[7] that the troops actually encamped on Hills, but the engravings already cited place them on the north of the City, and they also shew that the permanent marks which the camp could leave in the ground would be those of a fence

1. Charles Blackstone's MS. Book of *Benefactions to Winchester College etc., etc.* (preserved in the College Muniment Room), pp. 111-115: passage quoted, p. 114. Information kindly given by Mr. Herbert Chitty.

2. Underlined in MS.

3. *History and Antiquities of Winchester*, 1773, vol. II, p. 150 ff. (the anonymous author was Mr. Porter of Winchester: see *Gentleman's Magazine* 66, i, p. 287): *The Winchester Guide*, 1780, pp. 87-9: Milner, *History . . . . of Winchester*, 1798, vol. I, p. 445: Ball, *Historical Account of Winchester*, 1818, p. 78. Milner's figure is 7,000.

4. As shewn by engraving by Godson, Surveyor to the Winchester Corporation, in Gough's *Topographical Collections, Hants*, dated Oct. 18, 1756, and entitled *A Correct View of the Hessian Camp on Barton Farm near Winchester*, which is preserved in the Bodleian.

5. As stated on another engraving, in the same *Collections*, of that date, dedicated to Lord Howard of Effingham, who was in command of the camp, which apparently shews the same site.

6. Wooll, *Life of Warton*, p. 278.

7. *Wykehamica*, p. 294.

against which arms were piled on either side of the parade-ground, of a thatched hut with projecting wings standing at the back of the lines, and of six square or circular 'Kitchens cutt in the ground' which faced the hut.

No such traces were found in the excavations, nor is it in the least likely that if this unit changed its camping-ground between 1760 and 1762, so waterless and inaccessible site would have been chosen: Adams must in fact have been guessing.

Indeed, the Wykehamical body would no doubt have protested had such a military intrusion been continued for longer than one day. We have already noticed Warden Huntingford's protest of 1799, which was evoked by soldiers merely bathing in the Itchen: he gained his point, and the Commander-in-Chief was equally tractable when he repeated the School's claim to Hills on the occurrence of a fresh intrusion in 1811, while during Napoleon's threat of invasion, when the Government put a beacon on Hills, orders were issued to the watch that while preventing mischief they were "to be civil to the boys while at their exercise on the hill."[1]

The only relics found in the excavations which seem likely to be connected with any of these occasions are two brass ferrules, rather too small to belong to scabbards and perhaps from aiguillettes, and a lead musket-ball weighing 1.095 oz. and .689 ins. in diameter, clearly a bullet for the muzzle-loading musket known as 'Brown Bess,' in use in the British Army without change of bore from *c.* 1700 to 1840. The regulation diameter for such bullets was .677 ins., but the bore of the musket was .75 ins., and the tolerations were habitually large, this ball being distinctly on the large and heavy side (the standard weight was only 1.06 oz.).[2]

The fragments of tobacco-pipes and wine-bottles found near these close to the site of the west end of the Chapel seem to be in part contemporary, but may have been dropped by anyone: perhaps some of the pipes, like the 17th century examples noticed above, belonged to College Præfects.[3]

The School was anyhow accustomed when Dean Hook was in it (1812-17) vigorously to repel intruders[4]; its own routine was then and later little changed from the previous two centuries.

1. Cook, pp. 342-3.
2. Information kindly supplied by Lieut.-Col. E. M. Ridley, Experimental Officer to the Director of Artillery, through the Adjutant, Small Arms School, Hythe.
3. See fig. 31 and p. 267 above: *cf.* Fearon, *The Passing of Old Winchester*, pp. 36-7.
4. Stephens, *Life of Dean Hook*, vol. I, p. 12.

About 1790, when Warden Huntingford revised *Tabula Legum*, he suppressed the obsolete rule of genuflecting to masters and inserted the previously unwritten one of keeping within the bounds of Trench,[1] but the latter of course continued to be a dead letter for Præfects and their selected friends.

The rigours of Morning and the delights of Evening Hills, the many and various games, and the impressions the institution made on boys according to their dispositions, are amply described in the literature of Wykehamical reminiscence.[2] As the first quarter of the 19th century wore on, and cricket and football, which could now be played far better in Meads, became more and more organized, the popularity of Hills declined.[3] The time-honoured sport of badger-hunting, indeed, was as yet strongly kept up, and in the '30's and '40's there was rifle-shooting in Chalk-pit, but though some football was played on the Hill until 1860, and cricket, in the form of Junior Match between College and Commoners, lasted till 1866, the whole affair was by then an anachronism. The tall-hatted procession had come rarely if ever to undergo a names-calling, and there was felt to be no virtue in the old customs like the pulling of Præfects up the Hill by teams of juniors, and the calling of ' Domum ' when it was time to go down by two juniors running round Trench one each side of the Hill, while a third went across the top.

In 1832 the bounds for Præfects were extended, in 1847 the hours were reduced, in 1859 the ascent ceased to be compulsory at all, in 1860 Morning Hills was discontinued. But shirking was now more prevalent than ever, and these and Dr. Ridding's still wider concessions of 1867 could not save the institution. Of the attempt made later in the same year to save it by different means, the Præfect of Hall concerned has himself very charmingly written[4]; the result was that in the autumn of 1868 Hills was abolished.

But the traditional associations of the place were strong enough not many years later to revive the custom of going there in a new form. The land has been since 1836 in the hands of the Ecclesiastical Commissioners, and in 1878 their lessee made an unwise and fruitless attempt to fence off the Hill. Indignation was strong in the School, and the feeling then

1. " Intra terminos | Ad Montem praescriptos | Quisque se contineto."
2. *e.g.* Adams, *Wykehamica*, p. 290 ff.: Fearon, *op. cit.*, ch. IV, and the authorities for Cook's ch. XXVII.
3. For this see Cook's ch. XXVIII.
4. Cook, pp. 362-3.

aroused may have helped to lead to the popular devising, in the years immediately following, of the custom of 'doing Hills' as a ceremonial ordeal for new men. The rites involved are not identical throughout the School, and are most fully honoured in College: many of them are meaningless, but at least 'tolling Labyrinth,' as already described, provides a link with the former practice.

In 1894 free access to Hills was again said to be threatened, and Dr. Fearon instituted an official custom, called in memory of its predecessor 'Morning Hills': before breakfast on a day at the beginning of the Summer and Autumn Terms the School climbs the Hill and sings the traditional hymn *Jam lucis orto sidere*, after which names are called by the Præfect of Hall.

Dr. Fearon also arranged, together with Dean Stephens, for a much-needed renewal of the clump of trees in 1897. There is some doubt about the kind of tree planted by the Militiamen of 1762. Milner [1] calls them firs, and they are so described till after the middle of the 19th century,[2] but in the '70's, when well over 100 trees were still standing, the majority were beeches. There is no record of re-planting before 1897, and the explanation must be [3] that Norborne Berkeley planted fir and beech together. The firs would grow much the quicker, and would mask the beeches until they themselves began to die off, when the beeches, having thus been protected during their slower growth, would at last predominate. But they in their turn were getting thin in the '90's, and fifty trees, again both fir and beech, were then added. Of these the firs have now all vanished: they appear in a minority of two to five in the 1909 Ordnance Survey, and almost all of the 53 trees remaining in 1917 were beeches. In fact the clump has been rapidly dwindling [4]: in 1925, when an accurate survey was made by one of the present writers, there were forty-five trees only, all beeches. Early in the previous year, however, a serious effort was made to restore the clump to its former glory by planting seedling beeches round these old trees. In spite of a wire fence, many have died, but if the survivors thrive and the old trees disappear, it will be possible

1. *History . . . . of Winchester*, 1798, vol. II, p. 154.

2. *e.g.* Moyle Sherer (entered College 1800), *Story of a Life*, vol. II, p. 82: Sewell, *To Catherine Hill, on leaving Winchester College* (which he did in 1821): Duthy, *Sketches of Hampshire*, 1839, p. 246: Moody, *Notes and Essays relating to Hants and Wilts*, 1851, p. 137: Woodward, *History of Hants*, 1863, vol. I, p. 12.

3. As Mr. Chitty has acutely pointed out to the writer.

4. However, the figures for 1922 given in *The Wykehamist*, no. 625, are certainly incorrect.

in the future to lay open and preserve the ruins of the Chapel,[1] which would thus be surrounded by a ring of trees, while the familiar aspect of the Hill would be unchanged.

For indeed it is a justly treasured landmark, and an importance more than local attaches to each of the three phases of its history, in the centuries before Christ as a British settlement and stronghold, in the Middle Ages as a place of devotion, and thereafter as a Public School playing-ground that has been strangely beloved.

1. See above, p. 220, with fig. 21.

APPENDIX I.

Summary of Accounts, 1927.

Credit.	£	s	d
By Subscriptions	189	17	6
	£189	17	6

Debit.	£	s	d
To Wages	112	14	6
„ Insurance	10	8	3
„ Printing Appeals and Notices	1	3	6
„ Photography	21	5	0
„ Hut and Fencing	29	0	0
„ Petty Cash	7	4	2
„ Cheques		4	0
Balance, transferred to 1928 Account	7	18	1
	£189	17	6

Summary of Accounts, 1928.

Credit.	£	s	d
By Balance, 1927 Account	7	18	1
„ Subscriptions	221	17	9
„ Interest on Deposit	1	11	9
	£231	7	7

Debit.	£	s	d
To Wages	118	7	0
„ Insurance	10	17	8
„ Printing Appeals and Notices	7	13	10
„ Photography, etc.	18	17	3
„ Huts and Fencing	39	5	6
„ Excavators' Expenses	26	8	4
„ Preservation and Repair of Finds	2	10	0
„ Petty Cash	4	5	5
„ Cheques		2	0
Balance, put towards expenses of producing Report	3	0	7
	£231	7	7

Examined and found correct,

F. J. Burnett
(*Hon. Treas. Hampshire Field Club*).

July 5th, 1929.

APPENDIX II.

Subscribers to the St. Catharine's Hill Excavation Fund.

1927.

	£	s	d
Hampshire Field Club	50	0	0
Warden and Fellows of Winchester College	10	0	0
Warden and Fellows of New College	10	0	0
Old Wykehamist Lodge (per L. Forsyth)	5	5	0
Winchester College Archæological Society	1	10	0
Anonymous (per C.F.C.H.)	60	0	0
Anonymous (per J.N.L.M.)	5	0	0
Colonel H. C. Adams		5	0
Sir R. L. Antrobus	1	1	0
Mrs. C. L. Awdry	5	0	0
Rev. R. D. Beloe	1	0	0
F. J. Birkbeck	1	0	0
G. H. Blore	1	1	0
Colonel N. A. Budd		10	6
H. H. Child	1	1	0
H. Chitty	1	1	0
Rev. A. W. Chute		10	6
A. K. Cook	1	1	0
Major W. S. Cowland		2	6
R. Cripps	1	0	0
Hon. R. S. Cripps	2	2	0
A. R. Cross	1	1	0
G. F. Davies		5	0
Sir J. H. Du Boulay		10	0
J. G. Earle	1	0	0
Rev. Canon E. H. Fellowes		5	0
J. A. Fort	1	0	0
J. S. Furley	3	3	0
Rev. Canon A. W. Goodman		10	0
J. L. Gordon Clark		10	0
Very Rev. the Dean of Winchester	1	1	0
Dr. E. F. Jacob		10	0
H. W. B. Joseph	1	0	0
Miss Lee		10	0
S. S. G. Leeson		10	0
P. E. Matheson	1	0	0
M. Platnauer	2	2	0
Rev. R. Quirk	2	2	0
P. K. B. Reynolds	1	1	0
W. P. Richardson		10	0
B. L. Richmond	2	0	0
Major M. Robertson	1	1	0
C. E. Robinson	5	0	0
P. C. Thornton		5	0
Professor C. H. Turner	1	0	0
Rev. Dr. A. T. P. Williams	2	0	0
Viscount Wolmer, M.P.	1	1	0
R. M. Wright		10	0
	£189	17	6

1928.

	£	s	d
Hampshire Field Club	50	0	0
Royal Archæological Institute	10	10	0
Warden and Fellows of Winchester College	10	0	0
Warden and Fellows of New College	10	0	0
Old Wykehamist Lodge	5	5	0
Old Wykehamist Rose Croix Chapter, No. 184	5	5	0
Society of Antiquaries of London	5	0	0
Oxford University Archæological Society	1	1	0
Anonymous (per C.F.C.H.)	50	0	0
Anonymous	5	0	0
Anonymous (per Hampshire Field Club)	1	1	0
Sir R. L. Antrobus	1	1	0
T. D. Atkinson		10	0
The Earl of Belmore		10	0
F. J. Birkbeck	1	1	0
Colonel N. A. Budd		10	0
Rev. F. G. Buller		5	6
C. J. P. Cave	2	0	0
Rev. A. W. Chute		10	0
R. K. Coxe		10	0
O. G. S. Crawford	5	0	0
C. W. Crawley	1	0	0
R. Cripps	1	1	0
A. R. Cross	1	1	3
Mrs. Cruickshank	1	0	0
G. F. Davies		5	0
Mdlle. H. F. de Chaumont	1	1	0
Miss M. K. de Chaumont	1	0	0
A. Devine		10	6
Sir J. H. Du Boulay		10	0
H. C. S. Dumas	1	0	0
J. Durst		10	0
J. A. Fort	1	0	0
J. S. Furley	3	3	0
Rev. E. H. Goddard		10	0
Rev. Canon A. W. Goodman		10	6
Miss Hagen	1	0	0
Lady Hill	2	2	0
W. Inderwick	2	0	0
Dr. E. F. Jacob	2	2	0
H. W. B. Joseph	1	0	0
R. Jowitt		10	6
Colonel J. B. Karslake	2	2	0
A. J. King	1	1	0
A. C. Lee	1	1	0
His Honour Judge Lindley	1	1	0
The Earl of Malmesbury	1	0	0
Miss C. Morey		10	6
The Bishop of Newcastle	1	1	0
Mrs. Norton	2	2	0
C. C. Oman		10	0
Miss Orme		10	6
A. W. Parsons		10	0
Captain Pearson, R.N.	1	0	0
Major J. R. Pinsent	1	0	0

	£	s	d
Dr. M. J. Rendall	2	2	0
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INDEX

Abbot, Wyman, 146, 165.
Abbot's Worthy, British village at, 5 n.
Abbotsbury, 254.
Abercromby, Lord, *Bronze Age Pottery*, 140, 141, 142, 144, 155, 163.
Abington Pigotts, Settlement at, 163.
Acts of St. Catharine, legendary, 249.
Adams, *Wykehamica*, 260 & n., 276 n. 278 n., 282 & n., 283, 284 n.
Aedui, 172.
Aegean area, the, Bird-figures in, 127.
Aeneid, the, 269, 273.
Affrique, Camp d', 74.
Agricola, 83.
Aisne, 81.
Aix-en-Provence, Church maze at, 271.
Alexandria, 248, 249.
Alfred's Castle, 38.
Alkborough, Turf maze at, 269, 270, 271, 273.
All Cannings Cross, 3, 143 & n., 149, 157, 166, 181.
  Culture of, 79-81, 84, 131, 170.
  Pits at, 31, 43 & n.
  Pottery from, 20, 34, 78, 88, 97, 99, 100, 102, 104, 105, 106, 107, 109, 111, 116, 119, 120, 121, 144 & n., 145, 153 n., 156 & n.
  Chalk discs from, 123.
  Needles from, 126.
  Oyster shells from, 136.
  Querns from, 125.
  Ribknife from, 126.
  Spindlewhorls from, 134.
  Swan-neck pin from, 133.
  Whetstones from, 134, 181.
All Hallows', Stanyng, 255.
Allcroft, A. Hadrian, *Earthwork of England*, 67, 68, 82, 83 n.
Alonso, 272 n.
Alpine folk (lake-dwellers), 142, 146, 150, 151, 161 (see also Swiss lake-dwelling culture).
Alpine skulls at Old England, 149.
Alps, the, 150, 158.
Alresford, British coins from, 174; Canal to, 234.
Alsace, Finger-print pottery in, 151.
Altehöfe, 81.
Altertümer unserer heidnischen Vorzeit, 128, 131, 151.
Altkönig, 81.
Alton, British coins from, 174; Brooches from, 133.
Amiens, Church maze at, 271.
Anderida, Forest of, 171.
Anderson, Furneaux & (see Furneaux)
Andover, British coins from, 174.
Arbury Banks, Pottery from, 164.
Archæological Institute, the, 279 n.
Ariadne, 270, 271.
Armsheim, Grave at, 131.
Armsley, Settlement at, 164.
Army, the British, 283.
Arnoaldi period, 130.
Arnold-Forster, Miss F., *Studies in Church Dedications*, 248 n., 250 n., 253 n., 256 n.
Arras, 171; Church maze at, 271.
Arretine pottery, 170.
Aryan peoples, 150.
Ashmolean Museum, 245; Pottery in, 163, 165.
Ashwell (see Arbury Banks).
Athelstan, King, 251, 252.
Athelwulf, King, 192.
Atkins, Martin, 67.
Atrebates, British, 170, 187; Gaulish, 171.
Attic black-figure vases, at Camp du Château, 74.
Atwick, 145, 167; Pottery from, 99, 106, 112, 119.
Aubrey, John, on St. Catharine's Hill, 10, 12 n.; on mazes, 272.
Augustodunum, 172.
Augustus, Emperor, 3, 171, 172.
Auly-Auly, 265.
Aunjetitz culture, 150.
Austria, 150; Bird-figures in, 129; Churches in, 205.
Autun (see Augustodunum).
Avaricum, *Murus Gallicus* at, 65.
Avington, British coins from, 192.
Aylesford (see Swarling - Aylesford Cremation Culture).

Badger, William, 263 n.
Balingen, 55.
Ball Court (Win. Coll.), 265.
Ball, *Historical account of Winchester* (1818), 282 n.
Bampton, Calais Farm, 165.

Bantham Camp, 68.
Barbonne, Late Bronze Age pottery at, 156 & n.
Bardfield, Little, 250.
Barmby Moor, 250, 252.
Barnard, F. P., 244 & n.; *The Casting Counter, &c.*, 243, 244.
Barrow Bottom, Inhumation at, 168.
Barter, Warden, 278; recuts Labyrinth, 279 n.
Barton Farm, Hessian Camp on, 282 n.
Basingstoke, Pottery from, 164; British coins from, 174.
Basyng, Prior William, 195.
Batavi, 152.
Bate, Miss Dorothea, 135, 247.
Bath, 172; St. Catharine patroness of, 252 & n.
Batheaston, 250.
Battery Hill, Late La Tène settlement at, 176, 188.
Inhumation at, 176, 177 (see also Stanmore).
Bayeux, Church maze at, 271.
Beacon Hill, Burghclere, 28.
Beaker peoples, 150.
Beaulieu Abbey, 196.
Behn, *Beiträge zur Urgeschichte des Hauses*, 56 n.
Festung in *Reallexikon der Vorgeschichte*, 72 n., 79 n., 80 n., 81 n.
Prähistorische Festungstore, 81 n.
Belgae, the,
Immigrations of, 3, 80, 160, 161, 171, 173, 177, 182.
Woodland and valley habitation of, 84, 173, 187.
practise cremation, 176.
Pottery of, 92, 138.
Teutonic blood in, 173.
Gaulish, 171, 187.
in neighbourhood of Winchester, 4, 122, 138, 170.
at Winchester, 172, 175, 183, 187, 188.
at Worthy Down, 185.
Bellarmine ware, 266.
Bembridge limestone, Cist at Sheepwash of, 176.
Berkeley, Col. Norborne, 282, 285 (and see Botetourt, Lord).
Berkshire Downs, the, 147.
Bermondsey Abbey, 203; Abbot of, 203.
Bersu in *Fundberichte aus Schwaben*, 70 n., 74 n.
Beuvray, Mont, 81, 170, 172.
Beverley, St. Mary's, 211.
Bibracte, 172 (and see Beuvray, Mont).
Bigbury Camp, 49, 173.
Bingham, John, 277 n.
Birchington, Bronze hoard at, 147, 167.
Birkbeck, F. J., 8.
Bishop's Waltham, 2.
Bitterne, Roman fibula from, 139.
Black Death, the, 253, 254, 256.
Blackbridge, Winchester, 265, 276.
Blackbridge House, Winchester, 279n.
Blackmore Museum, Salisbury, Pottery in, 166.
Blackrod, 253.
Blackstone, Charles, *M.S. Book of Benefactions to Win. Coll.*, 282 n.
Blewburton Hill, Pottery from, 163.
Blois, Bishop Henry de, 223.
Bodleian Library, Engravings in, 282 n.; MSS. in, 10.
Bogoudonou, Urn with Bronze hoard at, 154.
Bolton, 253.
Borlase, 204.
Bosch-Gimpera, 150 n.; *Die Vorgeschichte der Iberer*, 153 n.
Botetourt, Lord, 197, 282 (and see Berkeley, Col. Norborne).
Boughton Green, Turf maze at, 269, 272.
Bourbon, Abbot Jean de, 203 n.
Bouzonville, Bronzes from, 132.
Bowerchalke, Pottery from, 166.
Bradford-on-Avon, 253.
Braintree, Pottery from pits at, 163.
Brambridge, 192.
Brandon, Inhumations at, 168.
Brenner in *Nassauische Heimatblätter*, 74 n.
Brentford (see Old England).
Bristol, *Cat and Wheel* Inn at, 255 n.
Britain,
Survival of Stone Age stock in, 161.
Immigrations into, 140 ff.
Woodland and valley settlement in, 84, 173.
Connection with Channel Islands, 177.
Trade with France, 154.
Connection with Spain, 79, 80.
Celts in, 3, 149, 150, 155.
Belgae in, 3, 171-2, 187.
Tribes in Roman, 170.
Iron introduced into, 2.
Early Iron Age buildings in, 55.
Early Iron Age pottery in, 120-2; finger-print, 104-5, 152.
Hallstatt Culture in, 153, 159-60.

Britain,
La Tène Culture in, 159, 169.
La Tène I brooches in, 132, 158-9.
War and peace in, 63-4.
Timber fortifications in, 67 ff.
Hill forts in, 72 ff., 173.
Pastoral enclosures in, 78 ff.
Contracted burials in, 181.
Native coins in, 171, 174; found in Winchester, 185.
Foreign coins in pre-Roman, 187.
Deverel-Rimbury urns in, 104, [140 ff.
Italian brooches in, 133.
Oysters eaten in, 136.
Bronze swords in, 142.
Briteiros, 79.
British Archæological Association meets in Winchester, 197.
British Museum,
Pottery in, 102, 103, 105, 110, 112, 113, 118, 145, 151, 163-8.
Bouzonville Bronzes in, 132.
Currency bars in, 182.
Rings in, 245.
Bronze Age Guide, 5 n., 128.
Early Iron Age Guide, 158 n., 184.
Catalogue of English pottery in the, 234, 236, 240.
(Natural History), 135, 136.
British War Office, *Manual of Field Engineering*, 69.
Brittany,
Bronze Age culture of, 154.
Slate in, 203-204.
Britton, 278.
Brixton Deverell, Settlement near, 166.
Broadstairs, 164.
Broadway, Winchester, Finds under, 183, 187.
Brockley Warren, 5 n.
Brooke, G. C., 139, 174, 185, 243 n.
Brown Bess, 283.
Brunanburh, 251.
Brute, King, 273.
Brythonic Celts and tongue, 142, 149, 151, 160, 161.
Bubb's Cross, Winchester, 261, 262.
Bué, Henri, 255.
Bulliot, *Fouilles du Mont Beuvray*, 81 n.
Burbage, 256.
Burghclere, Beacon Hill, 28.
Burghead, 67 n.
Burne (quoted), 5 n.
Burnett, F. J., 287.
Burnswark, 77 map, 83.
Bushe-Fox, J. P., 143, 147, 149, 154, 164, 170 n., 171.
Buxton, L. H. Dudley, 247.
Caburn, the,
Entrance to, 77 map, 82.
Palisade at, 168-9.
Pottery from, 103, 115, 116, 145, 166.
Deerhorn implement from, 125.
Oyster shells at, 136.
Caerdroia, 273.
Caerleon, Roman amphitheatre at, 15.
Caesar, Julius, 3, 49, 64, 171, 172, 173; *de Bello Gallico* (quoted), 38 & n., 49 n., 65, 81 n., 171.
Calais Farm, Bampton, 165.
Calendar of Charter Rolls, 193 n.
Calendar of Patent Rolls, Henry VI, 255 n.
Calendar of Wills, 255 n.
Caley, Ellis and Bandinel, editors of Dugdale, 192 n.
Calleva Atrebatum, 170, 171 (& see Silchester).
Calstone Fields, Calne, 229.
Cambridge Ancient History (see Navarro).
Canterbury mint, the, 243.
Canute (see Cnutus).
Carausius, Coin of the Emperor, 26, 139.
Carew, *Survey of Cornwall*, 204.
Carlisle, 254. Cathedral, 253.
Carn Brea, 80.
Cartailhac, E.,
Les ages préhistoriques dans L'Espagne et dans le Portugal, 79 n.
Carthaginian coins in Britain, 186.
Casterley Camp,
Entrance to, 77 map, 82.
Pit in entrance of, 31.
Pottery from, 111, 138, 166.
Belgae at, 170.
Castle Hill (see Scarborough).
Castle Law, Forgandenny, 67 n.
Cat and Chapel (inn-sign), 255.
Cat and Wheel (inn-sign), 255.
Catharine, St. (see St. Catharine).
Catharine Hall, Cambridge, 254.
Catharine Wheel (inn-sign), 255.
Catherington, 250.
Catioroc, the, Inhumation at, 177.
Catuvellauni, 165.
Cavenham Heath, 165.
Celts, the, 141, 142, 150 (see also Goidels & Brythons).
Invasions of, 79, 149, 161.
Migrations of, 153 ff.
Admixture with the Germans, 75, 84, 153, 156, 160.
in Central Europe, 150.
in Germany, 80.

Celts,
on the Lower Rhine, 75, 153.
in Spain, 79, 153.
in France, 80, 153.
in S.W. Britain, 122, 129, 147, 165, 173, 181.
Upland settlements of, 172.
Fortifications of, 65, 70, 81, 173.
" Celtic Lords," 142, 150.
Cerne Abbas, 255.
Certosa type of brooch, 131.
Chale, 253 & n., 256, 257.
Chalfield Magna, 252.
Chamber Court (Win. Coll.), 262.
Chalk Pit (on St. Catharine's Hill), 284.
Champagne,
Celts in, 153, 156-159.
Chariot burials in, 159 n.
Chandler, Warden, 261, 262; his MS., 261 n.
Channel Islands, the, 177 (& see Kendrick).
Chantries Act, the, 194.
Chapel (Win. Coll.), 261, 262, 263, 264.
Charlotte, Queen, 282.
Chartres, Church maze at, 271.
Chassey, Camp de, 73 n.
Chastel-sur-Murat, Pottery from, 156 n.
Chastleton, 75, 165.
Château, Camp du, 74.
Chattenden, Pottery from, 164.
Chaundy, G., 8.
Checkenden Hall, nr. Bishopstoke, Bronze sword from, 5 n.
Cheesefoot Head, 5 n., 164.
Chemins de Jérusalem, 271.
Cheriton, 174; Battle of, 176 n.
Cherry Hinton (War ditches), 163.
Cherwell, the, 165.
Chester, Richard, Earl of, 254.
Chesterford, 163.
Chichester, 172 n.
Chilbolton, West Down, Belgic settlement on, 174.
Chilcombe, 1; Church of, 192 & n., 193, 194; Priest of, 210.
Manor of, 6, 192.
Childe, V. Gordon, 150 n.
Chilham, 273.
Chiltecumbe, =Chilcombe, q.v.
Chilterns, the, 147.
Chilworth Ring, 4 map, 5 n.
Chinese coin, a modern, 22, 244.
Chiselhampton, 256 n.
Chitty, H., 275 n., 282 n., 285 n.
Chouilly, 156.
Christ Church, 194 & n.
Christ Church, Book of Evidences, the, 194.
Christchurch, Hants, 253; Prior of, 253.
Christian basilica, Maze in an early, 270.
Christison, *Early Fortifications in Scotland*, 67 n., 82.
Chun Castle, 79, 80.
Cimbri, 81.
Cirencester Church, 254.
Cissbury, 166; Construction of earthworks at, 14.
City Museum (see Winchester).
Civil Wars, the, 272, 273.
Clapham, A. W., 222 n.
Claudius, Emperor, 187.
Clay, Dr. R. C. C., 78 & n., 87 n., 96, 104, 140, 145, 148, 158 n., 161, 166, 168.
Clay pipes, stamped, 266, 267.
Cloisters (Win. Coll.), 262, 277 n.
Close, Sir Charles, 8.
" Clump " (see St. Catharine's Hill).
Cluniacensis, Bibliotheca, 203 n.
Cluny, Jean de Bourbon, Abbot of, 203.
Cnossos, Coins of, 270.
Cnutus Rex (Canute), 192 n.
Cobham, 166.
Cohen, 139.
Colchester, Earthworks outside, 177. Bucket urn from, 105; with iron spear-head, 146-7, 158.
Colchester Museum, 146; Pottery in, 163; with Bronze hoard, 167.
Cold Kitchen Hill, Settlement on, 166.
Colden Common, Bronze hoard from, 5 n.; Pit dwellings at, 5 n., 164.
Coldham Common, Pot from, 118.
Coldhannington, 192.
College (see Winchester College).
College of St. Mary Winton (see Wordsworth).
Collingwood, R. G., 158 n.
Comacine culture, 131.
Commander-in-Chief of the Militia in Winchester, the, 259, 283.
Commentaries, Caesar's (see Caesar, *de Bello Gallico*).
Commius, founds a dynasty in South Britain, 171; his dynasty paramount, 187.
Sons of, 174, 185-6; their coins, 185-7.
Commoners (see Win. Coll.).
Commonwealth, the, 272.
Compton, 192.

Compton Beauchamp, 163.
Congress of Archaeological Societies (see Earthworks Committee).
Constantine the Great, Emperor, 249.
Cook, A. K., *About Winchester College*, 259 n., 260 n., 262, 263 n., 264 & n., 265 n., 267, 276 & n., 283 n., 284 n.
Cora, Camp de, 74.
Corhampton Down, British village on, 4 map, 5 n., 164.
Cornwall,
its tin, 80.
Celtic invasions in, 79-80, 159.
Bronze Age urns in, 155.
Contracted burials in, 181.
Slate in, 202-204.
Knights Templar in, 251.
Corsini type of brooch, 130.
Cossall, 256.
Cotswolds, the,
Immigrant culture on, 147-158.
Limestone slates from, 203.
Coulton, Dr. G. G., 271 n.
Cowlam, Brooch from, 159.
Cox, J. C., 272 n.
Churches of the Isle of Wight, 253 n.
Coxed, Warden, 277 n.
Cranbourne Chase,
Belgae in, 170.
Pottery from, 104, 106, 107, 142, 143.
Square earthworks in, 142, 143.
Crawford, O. G. S., 5 n., 8, 38, 68 & n., 141, 142, 143, 146, 147, 149, 151, 154 n., 161, 181 n.
Wessex from the Air, 82 n
Air Survey and Archaeology, 5 n.
Cretan Labyrinth, the, 270.
Cromwell, Oliver, 176 n., 179.
Crook, 253.
Crusaders, the, 251, 257.
Cumberland, Slate in, 202; Turf mazes in, 272-3.
Cunetio, 183.
Cunnington, Mr. & Mrs., 14; Mrs., 78 n., 229.
Curwen, Dr. E. Cecil, 78, 172 & n.
Curwen, Dr. Eliot, 166.

"Daedalean Work," 278.
Daedalus, 270.
Dale Collection, in Winchester City Museum, the, 139.
Danebury, 67; British coin from, 174,
Danes, the, 281.
Danube, the, 142, 150.
Davis, Rev. F. N., 8.
Davis and Thurnam, *Crania Britannica*, 67.
Deal, Pottery from, 160 n.
Dean and Chapter of Winchester, the, 195.
Dean of Winchester, the, 259.
Death Pits (Winchester), 1.
Dechelette, J.,
Manuel d'Archéologie, 38 n., 65 n., 70 n., 73 n., 74 n., 75 n., 81 n., 128, 132, 155, 159 n., 173, 176 n., 184.
in *Revue Archéologique*, 128.
Translation of Pič, 132.
Degenfeld Barrows, 151.
Deidesheim, 81.
Delabole slate, 204.
Delos, 270.
Denmark, Germans in, 152; Cauldrons in, 128.
Deverel Barrow, 140.
Deverel-Rimbury Urns, 140-5, 147-9, 151, 155, 157, 161, 163, 164, 167.
Devizes Museum, Pottery in the, 167.
Devon, Celts in, 80; Slate in, 202-4.
Didcot, Newbury and Southampton branch of the G.W.R., the, 1.
Diersfordt, Barrows at, 152 n., 153 n.
Digoyn, Portus de, 203 n.
Dinas, Penmaenmawr, 38 n.
Dissolution of the Priory of St. Swithun, the, 194.
Dobuni, 165.
Dolebury, Entrance to, 77 map, 83.
Domesday book, Churches in, 192, 250.
Domesday, the Winchester, 178.
Dompierre, Pottery from, 156 n.
Domum, Dulce (see Dulce Domum),
Domum Cross, 230, 231; Traditional origin of, 7, 276, 278.
Domum Tree, 276.
Donnersberg, 81.
Dorchester (Dorset), 172.
Dorset,
Deverel-Rimbury Urns in, 140-147.
Urns in, 155.
Pottery from, 147, 163.
Dovercourt, Pottery with bronze hoard from, 167.
Drapery, the (Northampton), 225.
Draughton, 252.
Drayton, 256.
Druit Collection, Pottery in the, 164.
Duchesne (see Marrier and Duchesne).
Dugdale, *Monasticon*, 192 n., 194 n.

Duhn, von, 130.
Dulce Domum, 275-78.
Dummer, Urnfield at, 5 n.
Dunaverny Bog, Flesh-hook from, 128.
Dunning, G. C., 100, 111, 112, 115, 118, 119, 120, 123, 146 n., 163, 164, 165, 166, 167, 170 n.
Dunstable, Miracle play performed at, 250.
Durden Collection, Pottery in the, 163.
Duthy, *Sketches of Hampshire*, 191 n., 285 n.
Dymond & Tomkins, *Worlebury*, 68.
Dymond in *Journal of the British Archaeological Association*, 83 n.

Earthworks Committee Report, 8, 12 & n.
East Anglia,
  Bucket Urns in, 146, 148.
  Inhumation in, 148.
  Skulls in, 149.
East Coast, Immigration on the, 146, 158.
Eastbourne, Hallstatt pottery from, 97, 144, 166.
Easton, 192.
Easton Church, 223 fig., 224.
Ecclesiastical Commissioners, the, 7, 8.
Edward the Confessor, King, 179.
Edward I, King, 193.
Edward III, King, 255.
  A silver halfpenny of, 230, 243.
Edward IV, King, 254.
Effingham, Lord Howard of, 282 n.
Eguisheim, Pottery from, 151.
Egypt, the King of, 249.
  Scarab of the XXVIth dynasty of, 133.
  Ptolemaic coins of, 186.
Eifel, Celtic Hill-forts in the, 156.
Elizabeth, Queen, 7, 260.
Ellesborough, 163.
Elton, 251.
England, Turf mazes in, 269, 272-3; no Church mazes in, 271 (and see Britain).
Eppillus, Coins of, 171.
Eskdale, 254.
Essex, Pottery in, 146, 163, 167.
Eton, *Montem* at, 260, 261.
Etruscan goldwork, 130; Spits, 130; Vase, 270.
Europe,
  Racial movements in, 141, 142, 150, 151, 157.
  Hill-forts in, 72, 73, 75, 81, 84.
  "Vitrified forts" in, 65.
  Sun-worship in, 128.
  Bird-figures in, 127 ff.
Evans, Sir John,
  Ancient Bronze Implements, 167, 181.
  Ancient Stone Implements, 181.
  Coins of the Ancient Britons, 171 n., 185, 186.
Evans, Ward- (see Ward-Evans).
Evening Hills, 266, 281, 284.
Ewart, Prof. Cossar, 136.
Eyton-upon-the-wild-moors, 256 n.

Farley Mount, 4 map, 5 n.
Farnham, British coins from, 174; Ware (16th century), 202, 236, 240.
Favret, Abbé, 156, 157.
Fearon, Dr., plants trees, 285.
  The passing of old Winchester, 278 & n., 283 n., 284 n.
Fen region, the, 146; rivers, 146.
Fengate, Peterborough, Pottery from, 99, 102, 103, 104, 107, 120, 146, 165.
Feuerbach, 74.
Fiennes, G. I. F., 8.
Fifield Bavant,
  Pits at, 31, 43, 87 n.
  Pottery from, 99, 106, 111-13, 115, 119, 120, 166.
  Objects of antler from, 125.
  Querns from, 123.
  Spindlewhorls from, 134.
  no worked flint from, 149.
Figsbury Ring, 76.
  Construction of earthworks at, 14.
  Entrance at, 75, 77 map.
  Pottery from, 166.
Finchale Priory, 212.
Findon Park, Pottery from, 109, 115-16, 120, 122, 145, 166.
Finsterlohr, 81.
Fisherton Pits, Pottery from, 166.
Fitzstephen, 272.
Flanders, Emigrants from, 146, 149; Population of, 160.
Flavian period, Pottery of the, 139, 184.
Flaxley, 256.
Flempton, 254.

Fletton, Settlement at, 164.
Flower Down, 8.
Foissac, Urn from, 155.
Fordingbridge, Pottery from, 164.
Forgandenny, 67 n.
Fort Harrouard (see Harrouard).
Fountain Buildings, Bath, 252.
Fox, Dr. Cyril, 146-149.
Archaeology of the Cambridge Region, 102, 110, 111, 133, 146 n., 148 n., 159, 160 n., 163, 164, 165, 168.
on La Tène I brooches, 127, 158, 161, 182.
France (and see Gaul).
Hill-forts in, 72 ff.
Hallstatt culture in, 150.
Fear of invasion from, 282.
Mazes in, 270.
North-West,
Population of, 154.
Pottery of Lausitz type in, 155-6.
Handled urns from, 155.
Slate in, 203.
Northern,
Relations with Britain, 160.
Emigration from, 157.
La Tène culture in, 158.
Woodland and valley settlement in, 84, 173.
Brooches in, 131.
South-Western,
Celts in, 153.
Fraternity of St. Catharine, a, 255.
Freeman, Dr. J. P. Williams (see Williams Freeman).
Freemen's oath, of Bath, 252.
Freshwater, Cist burial near, 176.
Frindsbury, 164.
Frisii, 152.
Fritton, 250.
Furneaux & Anderson, edition of Tacitus' *Agricola*, 83 n.

Gaelic (see Goidelic).
Gardiner, Bishop Stephen, 196.
Gardner, Eric, in *Wessex from the Air*, 76 n., 78 n.
Gardner, Willoughby, in *Arch. Cambr.* 83 n.
Gaul (and see France),
Emigration from, 3, 80, 173, 177.
Trade with, 186.
Town life in, 72.
Belgae in, 84, 171.
Roman conquest of, 3, 171.
Gaulish coin, a, 185, 186.
Gemeinlebarn, Bird-figure from, 129.
Geological Survey and Museum, Jermyn St., 135, 204 n.
Geometric Art, Greek, 150.
George II, King, Coins of, 244.
George III, King, visits Winchester, 282.
German archaeologists, 128; scholars, 150.
Germans, the,
Origin of, 152.
Advance of, 75, 81, 84, 141, 152.
Frontier with the Celts, 80, 157, 173.
Admixture with the Celts, 153, 156.
Ancestry of Belgae, 84, 172.
Forts of, 70, 73, 81 n.
Early Pottery of, 152, 153.
Germany,
Celts in, 80, 149.
Hallstatt culture in, 151, 153.
Hallstatt buildings in, 56.
Lausitz culture in, 150.
Hill-forts in, 70, 73-4, 81.
Entrances to earthworks in, 75.
Urnfield folk in South, 151, 156.
Churches in South, 205.
Glastonbury,
Lake village, 80.
Rotary Querns at, 125.
Whetstones at, 181.
Destruction of, 174.
Museum, Pottery in, 165.
Gloucester, Priory of St. Oswald at, 254.
Gloucestershire, Celts in, 159.
Gloucester Militia, 282.
Godson, 179, 282 n.
Godston, Walter de, 253.
Godwin, *Civil War in Hampshire*, 176 n., 179 n.
Godwin, Joseph, 265 n.
Goessler (see Gössler).
Goidelic Celts and tongue, 141, 142, 149, 151, 160, 161.
Gonzalo, 272 n.
Goodfellow, Robin, 272.
Goodman, Canon A. W., 178 n., 192 n., 195 n.
Goodwood (see Trundle).
Gordon, R., 278 n.
Göritz class of pottery, 144, 166.
Gosfield, 254.
Gössler, in *Fundberichte aus Schwaben*, 74 n.
Gothic Revival, the, 197.
Götze, in *Prähistorische Zeitschrift*, 74 n., 80 n.

Gough,
Camden's Britannia, 12 n.
Topographical Collections, Hants, 282 n.
Goury, *L'encetnte d'Haulzy et sa nécropole*, 74 n.
Graeco-Roman world, the, 270.
Graham, Miss Rose, 203 n.
Grantchester, Pottery from, 102, 110, 163.
Grass Court (Win. Coll.), 265.
Grays, 163.
Great Stour, the river, 49.
Great Western Railway,
Didcot, Newbury & Southampton branch of the, 1.
Viaduct, south of Winchester, 5 n.
Greece, Geometric art of, 150.
Greek coins, in Britain, 186.
Grimes Graves,
Early Iron Age pottery from, 99, 102, 104, 105, 119, 120, 146, 165.
Chalk cups from, 123.
Guébhard, A., in *Congrès Préhistorique de France*, 72 n.
Guerney, Thomas, 275.
Guernsey, Inhumations in, 177.
Guildford, St. Catharine's Chapel near, 253; Maze by St. Martha's near, 269.
Guildhall, the Old (Winchester), 184, 185.
Gunner, Rev. W. H., 279 n.
Guy's Rift, Slaughterford, 166.

Haberdashers of London, the, 255.
Hallstatt, 150.
Hallstatt period, the,
Celtic culture of, 142, 144, 145.
Rhenish culture of, 152, 153, 157.
in Britain, 5, 20, 55, 160.
in Brittany, 154.
in France, 131, 156, 157.
St. Catharine's Hill first occupied in, 11.
Hill-forts of, 70, 73 ff.; their entrances, 73 ff.
Vitrified fort of, 65 n.
Pottery of, 5 n., 6, 20, 88, 94, 95, 97, 99-107, 109-113, 115, 120-123, 141, 143-5, 147, 148, 151, 152, 156, 163-8, 169; with Bronze hoards, 147, 167.
Pastoral enclosures, 74, 78-9, 84.
Burial rites, 148, 168.
Buildings of, 55, 56.
Hallstatt period, the,
Bird-figures of, 127 ff.
Brooches of, 129 ff.; in Britain, 133.
Sword of, in Britain, 158.
Oven of, 5 n., 176.
Immigration at end of, 3, 75, 146, 147, 148, 159.
Halstow, Lower (see Lower Halstow).
Haltern, Pottery from, 170.
Ham Hill,
Pottery from, 97, 165.
Celtic occupations of, 147, 159, 165.
Hambledon Hill,
Fortifications on, 76, 77 map, 78.
Entrance to, 83.
Pottery from, 76, 163.
Hammersmith, Pottery from, 165.
Hampshire, 1.
Physical geography of, 2.
Map of central, 4.
Ancient roads in, 5 n., 29, 174.
Iron ore in, 134.
Clay with flints in, 36.
Immigrations into, 3, 147, 170.
Belgic tribes in, 170.
British coins in, 174.
Use of roofing slate in, 202.
Hampshire Field Club, 7.
Hon. Treasurer of the, 287.
Hampton Court, Maze at, 273.
Handley Hill, Pastoral enclosure on, 79; Pottery from, 104, 107, 163.
Harlyn Bay, Contracted burials at, 181.
Harpstedt pottery, 152, 153 & n., 163.
Harrouard, Fort, Vitrified rampart of, 73 n.; Pottery, 156 n.
Haulzy, Fortifications at, 74; Graves at, 153 & n., 156, 157.
Hauxton Mill, Pottery from, 111, 163.
Hawkes, C. F. C., in *H.F.C.*, 5 n., 174 n.
Hawley, Lt.-Col. W., 5 n.
Haydon, 253.
Head Master (see Winchester College).
Heath, F. R., *Dorset*, 251 n.
Heathery Burn hoard, Pottery with, 145, 167.
Heidenlocher, 81.
Heidetränksperre, 81.
Heiligenberg, 81.
Hellenes, the, 150.
Helvetii, Coin probably of the, 186.
Hengistbury Head,
Pottery from, 164.
Class A, 20, 97, 102-3, 105, 107, 109, 110, 112, 120, 143-4, 149, 154, 156.

Hengistbury Head,
Class B, 89, 116, 118, 120.
Class C, 97, 100, 102, 115, 120.
Classes I - J, 170, 184.
Worked flint at, 149.
Henry I, King, 256 n.; Coin of, 243.
Henry V, King, 240.
Henry VI, King, 255 n.
Henry VII, King, 255.
Henry VIII, King, 7, 195.
Hepher, E., 8.
Hepher, P. P., 8.
Hessian Camp on Barton Farm near Winchester, A correct view of the, 282 n.
Hessian troops encamp near Winchester, 282.
Heuneburg, 74.
Heunenburg, 70, 74.
High St., Winchester,
Discoveries under, 5 n., 127, 182, 184.
No. 83, Contracted burials under, 180 & n.
Highfield, Pottery from, 118, 166.
Hill, Dr. G. F., 186.
"Hille," 192 n.
"Hills" (Wykehamical *notion* for St. Catharine's Hill), 7, 192 n.
resort to by Win. Coll., 259-269, 281-286.
in Dulce Domum legend, 276-8.
"doing Hills," 280, 283.
Hilton, Turf maze at, 272, 273.
Hinksey Hill, Pottery from, 163.
Hitcham (Win Hill), Pottery from, 163.
Hobson, R. L., 234.
Hodhill, Entrance to, 77 map, 82, 83.
Hoddesdon, 253.
Hoernes, *Archiv für Anthropologie*, 131.
Hoernes-Menghin, *Urgeschichte der bildenden Kunst in Europa*, 128, 132.
Holbeck, 256.
Holderness, Sites in, 145; Turf mazes in, 273.
Holegh, John de, 255.
Holgate, C. W., 275 n.
Holland,
Early Iron Age pottery from, 99.
Peoples in, 152-3.
Hollingbury, 78.
Pottery from, 119, 166.
Holt, 253.
Holwerda, *Nederland's Vroegste Beschaving*, 152 & n., 153.
Holworth, 252.
Holy Land, the, 271.
Holy Sepulchre, the, 255.
Homiliary of St. Wulfstan, the, 250 n.
Hook, Dean, 283 & n.
Hope, M., 8.
Hopton, Lord, 176 n.
Horman, William, *Vulgaria*, 265.
Horncastle, 273.
Horne, Bishop, 265, 266.
Hospitallers, the Knights, 251.
Houghton-on-the-Hill, 250.
Hougue au Comte, La (see La Hougue).
Howard of Effingham, Lord, 282 n.
Howe, J. A., 204 n.
Hubert, *Revue Préhistorique*, 156 n.
Humby, S. R., 7, 8.
Hunsbury,
Celtic occupations of, 146.
Pottery from, 99, 111, 112, 118, 125, 146, 165.
Querns from, 125.
Hunsruck, 156.
Hunter, John, 275 n.
Huntingdonshire (see *V.C.H.*).
Huntingford, Dr., Warden of Winchester, 259, 283, 284.
Hurstbourne, Pottery from, 164.
Hutchins, *History and Antiquities of Dorset*, 251 n.
Hyda, Monasterium de (see Hyde Abbey).
Hyda, Liber Monasterii de, 196 n.
Hyde Abbey, 196.
Hyde St., Winchester, 179; Burials near, 183.
Hylton Castle, 251.
Hythe,
Experimental officer to the director of Artillery in the Small Arms School at, 283 n.
Adjutant in the Small Arms School at, 283 n.

Iberians, the, 153 n.
Ickleford, 252.
Illyrians, the, 150.
Imperial Forestry Institute, Oxford, the, 137.
Impernal, l'; Vitrified fortress at, 65 n., 74.
Ingoldmells, Pottery from, 146, 165.
Ingolstadt, 173.
Ipswich, Wolsey's projected College at, 194.
Irchester, 250.

Ireland, Bird-figures in, 128; Bronze swords in, 142.
Irish terrier, a large, 136.
Irish type of bronze axe, found near Winchester, 5 n.
Isaacson, Rev. S., 197.
Isle of Wight.
  Pottery from the, 164.
  Burial in, 176.
Isonzo, the, 131.
Issues, Les (see Les Issues).
Itchen, the, 1, 2, 4 map, 110, 171, 174.
  Bishop de Lucy's canal, 234.
  Navigation canal, 234.
  Bathing in, 281.
  Valley of, 176, 192.
Italian brooches, in Britain, 133, 186;
  „ Bird-figures on, 129, 130.
  „ bronzes, in Britain, 186.
  „ children, 273.
  „ lakes, the, culture around, 131.
Italici, 150.
Italy, Pottery imported from, 170; Mazes in, 270.
Iulus, 269, 273.

Jam lucis orto sidere sung on Hills, 285.
James, M. R., 261 n., 271 n.
Jarrow, 212.
Jerusalem, Pilgrimage centre, 255, 271.
Jesmond, St. Mary's chapel at, 211.
Jogasses, Les,
  Inhumations at, 157.
  Bird-figure brooches from, 131.
  Pottery from, 156.
Johnson, Christopher,
  Headmaster of Winchester College, 263 & n.
  his *Themes*, 197, 263.
  and origin of *Tabula Legum*, 264.
  and Labyrinth, 269.
Joulin, in *Revue Archéologique*, 154 & n.
Julaber's Barrow, 273.
Julian's Arbour, 273.
Julian's Bower, 273.
Juliberry's Grave, 273.
July Park, 273.
Jumièges, Robert of (see Robert).

Kalendar (see Calendar).
Karslake, Lieut.-Col., 172.
Katern, Seynt (see St. Catharine).
Καθάρινα (see St. Catharine).
Katherine (see St. Catharine).
Kattie Fair, at Eskdale, 254.
Keiller, A., in *Wessex from the Air*, 13 n.
Keinton Quarry, Pottery from, 165.
Keith, Sir Arthur, 146.
Kendrick, T. D.,
  Archaeology of the Channel Islands, 177 n.
  The Druids, 154 n.
Kent,
  Caesar in, 49.
  Hallstatt pottery in, 146.
  with bronze hoard, 167.
  La Tène pottery in, 164.
Kent, G. C., *British metallic coins and tradesmen's tokens*, 244.
Kerhon, Urns from, 154.
Kilmeston, 192.
Kinegyls, King of Wessex, 6, 192.
King & Watts, *Municipal Records of Bath*, 252 n.
King's College, Cambridge, Robert Woderlarke, Provost of, 254.
Kingsdown, 256.
Kingston Buci, Pits at, 166.
Kingston Hill, Pottery from, 166.
Kirby,
  in *Archaeologia*, 261 & n.
  Annals of Winchester College, 262 n.
  Winchester Scholars, 277 n.
Kitchin,
  Obedientiary Rolls of St. Swithun's Priory, 195 n.
  Wykeham's Register, 194 n.
Knighton Hill (Wilts), 78, 163, 167.
  "Wududurh" on, 78.
  Pottery from, 78.
  Square enclosures on, 167.
Knighton Hill (Berks), Rubbish Pits at, 163.
Knights Templar, the (see Templars).
Koberstadt, Hallstatt fortress at, 70; Entrance to, 74.
Kofler, in *Archiv fur Hessische Geschichte und Altertumskunde*, 70 n.
Kráft, in *Antiquity*, 150 n.
Kymric Celts and tongue, 142, 151.

La Hougue au Comte, Cist burial at, 177.
La Tène, 157 & n.
La Tène period, the, 3, 20,
  Culture of in Western Europe, 156-160.

La Tène period, the,
Culture of in Britain, 142 ff.
Culture of in the Channel Islands, 177.
Hill forts of, 65 n., 70, 72-3, 78, 79 ff. 173.
Vitrified, 65-66.
Pastoral enclosures of, 78, 79, 84.
Pottery of, 143, 144, 146, 147, 163-168.
Burial rites of, 157, 176, 177, 181, 183.
Buildings of, 55, 56.
Art of, 122, 133, 157.
Bird-figures in, 132.
Murus Gallicus construction in, 65 & n., 70.
La Tène I period,
Culture of in Britain, 144, 160.
Pottery of, 20, 21, 88, 89, 92, 94, 97, 99-103, 109-113, 115, 116, 118-122, 163-168, 169.
with bronze hoard, 147.
Burial rites of, 148.
Brooches of, 4 map, 5 n., 6, 127, 132, 158, 159, 161, 182.
Earthworks on St. Catharine's Hill erected in, 21, 58, 88, 92.
Immigrations at end of, 79, 80, 159.
La Tène II period,
Culture of in Britain, 144, 160.
Pottery of, 34, 92, 97, 106, 107, 110, 113, 115, 116, 118-122, 159, 169.
Brooches of, 170.
Entrance on St. Catharine's Hill reconditioned in, 61.
Occupation on St. Catharine's Hill ceases in, 11, 63, 64, 169.
La Tène III period,
Pottery of, 68, 78, 112, 113, 115, 119, 138, 163, 164, 170, 171, 175-177.
in Winchester, 183-187.
Brooches of, 139, 170, 171.
Gallic *oppida*, of, 72-73, 81 & n., 82, 84.
Belgic immigrations in, 160, 170, 171, 175.
British coins in, 171, 174, 185, 186.
Dagger of, 184.
Labyrinth, 7, 270,
Use of in Graeco-Roman world, 270.
Date of, 269, 275.
Popularity of, 273, 280, 281.
"a Daedalean work," 278.
and Dulce Domum, 269-280.
Lakenheath, Pottery from, 165.
Lancing, Hallstatt bowl from, 110, 166.
Lane End Down, Earthworks on, 5 n.
Lane Fox (Pitt-Rivers) (& see Pitt-Rivers),
in *Archaeologia*, 14 n., 68, 82 & n.
on post-holes, 69.
Langeberewe, John, 253.
Late Celtic Pottery, 138.
Laufer, Conrad, 244.
Lausitz, Culture, 141, 150, 151.
Type of pottery in Britain, 143, 144, 155, 156, 164, 166.
Leach, A. F., *History of Winchester College*, 260 & n., 261 & n.
Leckhampton, Pottery from, 164.
Leconfield, 251.
Leeds, E. T., 75, 165; in *Archaeologia*, 79-80, 129, 159 n., 181 n.
Lehner, *Der Festungsbau der jüngeren Steinzeit*, 70 n.
Leigh, M. S., 8.
Leigh Church, Gloucestershire, 256 n.
Leland, John, *Itinerary*, 190, 193, 194 & n.
Lemberg, Pottery from, 74.
Lemures, perhaps responsible for Labyrinth, 277.
Les Issues, Cist burials at, 177.
Lewes (see Caburn).
Lewis, the late H. C., 8.
Lexden, near Colchester, Earthworks [at, 177.
Liber Regis, 256 n.
Liber Winton, the, 178, 179.
Lichfield, 275 n.
Lidbury Camp, 78, 166,
Entrance to, 76, 77 map.
Pottery from, 103, 109, 166.
Liddington Castle, 78,
Pottery from, 78, 166.
Querns from, 123.
Liger, Flumen (= Loire), 203 n.
Ligurian settlements, 75.
Lindenschmidt, in *Altertümer unserer heidnischen Vorzeit*, 131.
Lippe, German invasions reach the river, 152.
Lipporn,
Walled entrenchment at, 74.
Entrance to, 79.
Litlington, 252.
Littleton,
British village near, 5 n.
Church in Chilcombe Manor, 192.
Llantwit Major, 212.
Llyn Fawr, Sickle from, 158. [55.
Lochenstein, Hallstatt house on the,

Loire, the, 203 n.
Londinium, Mint mark of, 139.
London,
  Bronze implements from, 145.
  Lack of evidence for pre-Roman settlement at, 187.
  Church of
    St. Catharine Cree, 250, 255.
    St. Catharine Coleman, 254, 255.
    St. Catharine near the Tower, 252, 255.
  Mint of, 243.
London Museum, pottery in, 165.
Long Sutton, 211.
Loughborough, Pottery from, 146, 165.
Lourdon, near Rouanne, Vitrified fort at, 65.
Loversal, 250.
Low Countries, the (& see Netherlands) Invasions from, 145; Celts and Germans in, 153.
Lowbury Hill, Settlement on, 163.
Lower Halstow, Settlement at, 164; Pottery from, 120.
Luard, Editor of *Annales Monastici*, 203 n.
Lucca Cathedral, Maze in, 271.
Lucy, Bishop Godfrey de, builds canal, 234.
Ludham, 254.
Lulworth, 252.
Luttrell Psalter, the, Pot figured in, 240.
Lydney Park, Rampart of fort in, 15.
Lyte, Maxwell, *History of Eton College*, 260 n.

Maby, J. Cecil, 137.
McDowall, K. S. P., 8.
Mac Iver, D. Randall,
  Iron Age in Italy, 130, 131.
  Villanovans and early Etruscans, 130.
McLintock, Dr. W. F. P., 134.
Magdalen Fair, 159.
Magdalen Hospital, Winchester, 223 fig., 224.
Mahr, Dr. Adolf, 131.
Maiden Castle, 172.
Mainz, Late Hallstatt pottery from near, 151.
Maldon, Pot from a creek near, 163.
Manching, 173.
Manning Collection (Ashmolean Museum), Pottery in, 165.
Marazion, 256 n.
Marchesetti, *Scavi nella necropoli di S. Lucia*, 131.
Marden, 167.
Margate, Pottery from, 112.
Marne,
  Celtic culture of the, 156, 157, 159.
  Pottery of the, 160.
  Torcs of the, 132.
Marrier and Duchesne, 203 n.
Marsiliana fibula, the, 130.
Martin Down, Square earthwork on, 79, 164; Pottery from, 111.
Mary I, Queen, 259 n.
Massilia, Founding of, 74.
Mathew, Robert, *De Collegio Wintoniensi* (1647).
  Evidence for
    "Morning Hills," 265-6, 268, 281.
    Absence of Clump, 267.
    Destruction of Chapel, 197.
    does not mention Labyrinth, 269, 274.
Matilda, the Empress, besieged in Winchester Castle, 179; founds hospital near the Tower, 252.
Matthews, W. H., *Mazes and Labyrinths*, 269 n., 270 n., 271 n.
Mawdelyn Fair (see Magdalen Fair).
Maxentius, the Emperor, in legend of St. Catharine, 249.
May, T., *The Pottery found at Silchester*, 138, 170 n.
Maze, the, 227 (and see Labyrinth).
Mazles, the, 272.
Meads (Win. Coll.), 266.
  Games in, 284.
  King George III in, 282.
Meare, Lake village at, 80; Querns from, 125.
Mediterranean, Early trade with Britain, 133, 158.
Melling Chapel, 256 n.
Menheniot slate, 204.
Merdon Castle, Earthworks at, 4 map, 5 n.
Merstham, 250.
Meschyn, Ranulph de, 254.
Metaphrastes, 250.
Micheldever Brook, 4 map.
Middle Gate (Win. Coll.), Names called at, 265.
"Middle Hills," 266.
Midsummer Night's Dream, Mention of mazes in, 272 n.
Mildenhall, 183.
Militia, the English County, 282-285.
Milner, *History of Winchester* (1798), 276, 278 & n., 282 n., 285 & n.

Milton Abbas, 252,
St. Catharine's Chapel at, 211, 251, 252, 253, 257.
Earthworks round this, 229 n.
Minerva, 258.
Minotaur, the, 270.
"Misery Corner," Northern corner of rampart on St. Catharine's Hill, 276, 278.
Mizmaze, 269, 272.
Moberly Library (Win. Coll.), Plan of Labyrinth in, 274, 278.
Mons Catharinae (see Warton, T.).
Monson-Fitzjohn, G. J., *Quaint signs of olde Inns*, 255 n.
Mont Beuvray, Inturned entrance at, 81; Pottery from, 170 (and see Bibracte).
Montacute, 254.
Montelius, *Civilisation primitive en Italie*, 130.
Moody,
Notes and essays relating to Hampshire and Wiltshire, 197 & n., 285 n.
Sketches of Hampshire, 197 & n., 278 n.
Morestead, 2; Church in Manor of Chilcombe, 192.
Morgan's Hill, Urn from, 102, 168.
Mediaeval earthworks near, 229.
Morning Hills, 266, 284, 285.
Mortlake, Pottery from, 165.
Muniment Room (Win. Coll.), 282 n.
Munimenta civitatis Oxonie, 203 n.
Muret, Château de, Inturned entrance at, 81.
Mutlow Hill, Barrow at, 102.

Nanterre, Chariot burial at, 159 n.
Napoleon, his threat of invasion, 283.
National Museum of Wales, Dept. of Geology in the, 204 n.
Navarro, J. M. de, in *Cambridge Ancient History*, 152 n., 153 n., 160 n.
Navigation canal, the old (Itchen), 1.
Neolithic pottery, Finger-printing on, 104.
Nero, Coins of found in Winchester, 187.
Netherhampton, 256.
Netherlands, the,
Invasions from, 149-158.
Germans and Celts in, 156.
Slates exported to, 204 (and see Low Countries).
Neuhaüsel, Entrance to fortress at, 74.
Neussargues, Pottery from, 156 n.
New Forest pony, a, 136.
Newnham, Pottery from, 111; Burial at, 159 n.
Newport (Monmouth), 212.
Nicholas, the *Taxatio* of Pope, 193, 194.
Noel, William, 275 & n.
Norden, 204.
Noricum, Working of iron in the province of, 150.
Norman billet moulding, 222.
,, column bases, 223 fig.
,, cruciform churches, 198, 224.
,, pottery, 242.
Norsbury Ring, 4 map, 5 n.
North, Dr. F. J., 204 n.
Northam, Canal from, 234.
Northampton Museum,
Pottery from Hunsbury in, 112, 118, 165.
Pottery from Fengate in, 99, 102, 107, 146 n.
Mediaeval tiles in, 225.
Mediaeval pottery in, 234, 239 fig., 241 fig., 242.
Northampton, The Drapery, Mediaeval pottery from, 225.
Northamptonshire, Use of limestone slate in, 203.
Northgate of Oxford, the, 203.
Notion Book, a MS., 278.
Novilara, Toilet implement from, 130.
Nowell, Anne, 275.
Nowell, J., Plan of Labyrinth by, 274, 275, 277-280.
Nürnberg, Jetton from, 202, 243, 244.
Nursling, 192.

Oare, Pottery from, 184. [166.
Oatlands, Weybridge, Pottery from,
Odiham, British coin from, 174.
Odilienberg, Fortifications at, 81.
Old Commoners (Win. Coll,), 281.
Old England, Brentford, 146, 165.
Pottery from, 97, 99, 165.
Skulls from, 149.
Oldbury Camp, Pottery from, 167.
Oliver's Battery (near Winchester), 4 map, 176.
Oliver's Battery (Abbotstone Down), 4 map, 164.
Oliver's Camp (near Devizes), Construction of rampart at, 14.

Oliver's Camp (near Devizes).
Post-holes under rampart of, 69.
Entrance to, 77 map, 82.
Hearths and pottery from, 167.
La Tène III fort at, 170.
Oman, Sir Charles, 243 n.
Oram's Arbour, Winchester, 177-180.
Orleansville, Maze in basilica at, 270.
Osmund, Richard, 254.
Otterbourne, 192.
Otzenhausen, Inturned entrance to fortress at, 81.
Outer Court (Win. Coll.), 266.
Ovington, 192.
Oxford,
Marne pottery from, 160 n.
Northgate of, 203.
Oxfordshire, 203; Limestone slate used in, 203.

Palmer, Roundell, *Lines on the 450th Anniversary of the Opening of the College*, 260 & n.
Paris, the Peace of (1763), 282.
Parisii, in Yorkshire, 159.
Park Brow (near Cissbury),
Settlements at, 144.
Late Bronze Age and Early Iron Age huts at, 55, 56, 96, 144.
Pottery from, 88, 99, 100, 103, 109-112, 115, 116, 120-122, 144-145, 166.
of Germanic type, 153 & n.
Early Iron Age cremation at, 148, 168.
Passmore, in *W.A.M.*, 78 n.
Pavia, Church maze at, 271.
Peake, H. J. E., 142, 143, 147, 161.
The Bronze Age and the Celtic World, 142-161.
Peers, C. R., in *Archaeologia Aeliana*, 212 n.
Pembroke College, Cambridge, 275 n.
Pen Dinas, near Hengwm, 38 n.
Pen-y-corddyn, 83 (and see Y-Corddyn).
Penny, W. E. W., in *The Connoisseur*, on Mediaeval Keys, 245, 246.
Pentecostal oblations from St. Catharine's Chapel, 195.
Pentin, H., in *Memorials of Dorset*, 251 n., 252 n., 255 n.
Pepper, F. W. C., 181 n.
Peterborough (see Fengate).
Petersfield, British coins from, 174.
Pettaugh, 254.
Philippa of Hainault, marries Edward III, 243.
Pič, *Hradischt de Stradonitz*, 132.
Picenum, Toilet implement from, 130.
Pigott, Stuart, 38, 68, 163.
Pilgrim's Way, the, 49, 174.
Pimperne, Turf maze at, 273.
Pitt, William, 282.
Pitt-Rivers, 14 (and see Lane-Fox), *Excavations*, 78 n., 79 & n., 104, 106, 107, 111, 125, 163, 164, 167, 170.
Pliny, the younger, 273.
Poisson, G., 156 n.
Pokesdown,
Late Bronze Age urn-field at, 141.
Early Iron Age pottery from, 164.
Pokorny, in *Reallexikon der Vorgeschichte* (*Britische Urbevolkerung*), 161.
Pompeii, Labyrinth design in mosaic, [270.
Pontevedra, 79.
Pontissara, Bishop John, 193.
Popham, 253.
Porter, 282 n.
Portsmouth Harbour, 2.
Portugal, Hill-forts in Northern, 79.
Potterne, Pottery from, 167.
Pougues-les-Eaux, Pottery from, 156n.
Praefects, the (see Winchester College).
Preshaw, Bucket Urn from, 5 n., 102, 168.
Preston-by-Faversham, 252.
Preston Candover, Iron spear-head from near, 5 n.
Price, Hilton, in *Arch. Journ.*, 267.
Prior of St. Swithin's, Roll of perquisites of the (1331), 194.
Prior's Barton, the Manor of, 195.
Ptolemaic coins, found in Winchester, 186.
Ptolemy, geographer, 159, 165, 170.
Pulborough, Pottery from, 144, 166.
Purbeck marble, 220.
Pyrenees, the,
Celts in, 153-156.
Cultural connections with Britain, 149, 154.
Sepulchral pottery from, 141, 144, 154, 155.

Quarr Abbey, 196.
,, stone, 198, 220.
Quennell, *Everyday life in the New Stone, Bronze, and Early Iron Ages*, 67.

Rademacher, E., in *Reallexikon der Vorgeschichte*, 152 n., 153 n.
Radford, C. A. Ralegh, 146 n., 163-165.
Rambach, Fortified settlement at, 73, 74.
Ravenna, Church maze at, 271.
Ravenstonedale, 211.
Reading, John, composer of tune of *Dulce Domum*, 276.
Reading Museum, Pottery in, 107, 164.
Redenham, Pottery from, 164.
Register of scholars (Win. Coll.), 275.
"Remedies" (see Win. Coll.).
Rheims, Church maze at, 271.
Rhine, the,
  Celts on, 75, 142, 152-157, 160, 187.
  Germans on, 153, 160, 187.
  Continuity of occupation on, 173.
  Connection with Britain in Early Iron Age, 56, 144-146.
  Hill-forts on, 73, 75, 80, 156.
  Pastoral enclosures on, 78-79.
  Finger-print pottery on, 151.
  Bird-figure from, 131, 133.
Rhone, Ligurian Hill-forts on the, 74, 75.
Rice Holmes, *Ancient Britain and the invasion of Julius Caesar*, 49 n.
Richard, Earl of Chester, 254.
Richborough, 139, 184.
Ridding, Dr., 284.
Ridgeway, Prof., in *P.S.A.*, 153.
Ridley, Lieut.-Col. E. M., 283 n.
Riedlingen, 70, 74.
Rimbury, Cemetery at, 140 (and see Deverel-Rimbury Urns).
Ringshall, 250.
Ringskopf, 81.
Rishton, 253.
"River" (Winchester), 265.
Robert of Jumièges, Missal of, 250 n.
Roial d'or, 243.
Rollright, Pottery from near, 168.
Roman Britain,
  Population of, 161.
  Local government of, 170.
  Frontier policy in, 83-84.
Roman bronze fibula, a, 126 fig., 139.
  ,, Republican coins in Britain, 186.
  ,, coin, a, 139.
  ,, mosaic pavements, 270.
Romano-British Pottery, 102.
  Chance finds on St. Catharine's Hill of, 22-24, 26, 96, 138, 139, 188.
  in Winchester Sewage Farm, 176.
Rome, Church mazes in, 271.
Römerschänze, 70, 75.
Romsey, British coin from, 174.
Romsey Abbey, 218; Column bases at, 223-224.
Rotherley, 170.
Rouen, 257.
Round, J. H., in *V.C.H. Hants*, 178 n.
Roundwood, near Micheldever, Pottery from barrow at, 5 n., 164.
Rowadon, Henricus de, 193.
Rowland's Gill, 211.
Royston, Inhumation at, 168.
Ruber Codex Bathoniae, 252.
Rudsdale, E. J., 167.
Rushmore Park (see South Lodge).
Rutchester, Roman fort at, 48.

Sabroso, 79.
Sacken, von, *Grabfeld von Hallstatt*, 128, 129.
Saffron Walden, Turf maze at, 273, 274.
St. Anne, Chapel of, 269.
St. Bees, 254.
St. Bertin, Abbey of, at St. Omer, 271.
St. Catharine, Legend of, 248-249.
  Devotion to, 229, 248-257.
  Buildings dedicated to, 248-257, with other saints, 250-252.
  Fraternity of, 255.
  (and see under localities.)
St. Catharine by the Tower (see London).
St. Catharine Coleman (see London).
St. Catharine Cree (see London).
St. Catharine's (see Winchester).
St. Catharine's-by-the-Sea, 252.
St. Catharine's Chapel, 190, 191, 259, 261, 262, 269, 286.
  built, 6-7.
  Documentary evidence for, 192 ff.
  suppressed, 194.
  destroyed, 195, 196, 259.
  forgotten, 197, 260.
  described, 198 ff.
  Date of, 222-224.
St. Catharine's College, Cambridge, 254.
St. Catharine's Hill,
  described, 1-2.
  History summarized, 3-7.
  Excavations recorded, 7-8, 197.
  Clump of trees on, 197, 261, 262, 267, 268, 281, 282, 285, 286.
  (and see Table of Contents.)
St. Catharine's Well (Eskdale), 254.
St. Clement's St., Winchester, Finds under, 183, 184.

St. Cross, 218; Column bases from, 223, 224.
St. Ermes, 256 n.
St. Ervan, 256 n.
St. Ervetus, 256 n.
St. Faith's (Winchester), 192.
St. Giles' Hill (Winchester), 1, 171, 267; Bucket urn from, 5 n., 182.
St. Godric, 212.
St. James' (Leigh), 256 n.
St. James' (Winchester), 192 & n.
St. James' Chapel (Winchester), 179.
St. James' Terrace (Winchester), Burial under, 181.
St. Kathren's Hill (see St. Catharine's Hill).
St. Martha's Chapel, near Guildford, [269.
St. Omer, 271.
St. Peter, 250, 252.
St. Peter, the R.C. Church of (Winchester), 223 fig., 224.
St. Peter's Street (Winchester), Finds under, 183.
St. Quentin, 271.
St. Roche's Hill, Goodwood (see Trundle).
St. Sampson of Dol, 251, 257.
St. Swithun,
Cathedral monastery of, 193, 195.
Obedientiary Roll of, 195.
Convent of, 194, 195.
Prior of, 159, 194, 195, 263.
St. Woolos', Newport, 212.
St. Wulfstan, Homiliary of, 250 n.
Salisbury Museum,
Pottery in, 166.
Mediaeval keys in, 245, 246.
Salmon, H. W. & Son, 8.
Samian ware, 139.
Sandars, H. W., in *Arch.*, 125.
Sandown, Pottery from near, 164.
Santa Lucia, 131.
Santa Maria in Aquiro, Rome, 271.
,, ,, in Trastevere, Rome, 271.
Santa Tecla, 79.
Saxmundham, Pottery from near, 165.
Saxony, Lausitz culture in, 150; Celts and Germans in, 80.
Scarborough, Pottery from, 97, 99, 100, 103, 104, 107, 109-112, 115, 120, 145, 153, 167.
"School," admired by George III, 282.
Schuchardt, in *Prähistorische Zeitschrift*, 70 n.
Schulten, Dr. A., 153 n.
Schumacher, in *Siedelungs und Kulturgeschichte der Rheinlande*, 56 n., 70 n., 75 & n., 81 n., 173 & n.
Scotland, Vitrified forts in, 65; Timber fortifications in, 67 n.
Sedgehill, 256.
Seine, the, Eastward limit of Hallstatt penetration, 156 n.
Sens, Maze in Cathedral at, 271.
Sewage Farm, the Winchester Corporation's, Prehistoric track across, 29; Hut site in, 175.
Sewell, *To Catharine Hill on leaving Winchester College*, 285 n.
Shakespeare, mentions mazes, 272.
Shamley Green, Urn from, 168.
Sheepwash, Isle of Wight, Cist burial at, 176, 177.
Shepherd's Race, 272, 273.
Sherer, Moyle, *Story of a life*, 285 n.
Shoebury, Pottery from pits at, 163.
Shore, T. W., in *H.F.C.*, 12.
Shorne, 253.
Silchester, Antler picks from, 125.
Pre-Roman pottery from, 138.
,, occupation of, 170-173, 175.
,, fortification of, 177.
Silesia, Lausitz culture in, 150.
Simpson, F. G., in *Archaeologia*, 145.
Sinai, Mount, in legend of St. Catharine, 248, 249, 251, 255, 257.
Sittingbourne, Bronze weapon in pot from, 167.
Skallerup, Wheeled cauldron from, [128.
Skitt's Hill, Pile-dwelling at, 163.
Slate, Mediaeval use of, 203, 204.
Slaughterford (Guy's Rift), 166.
Smith, R. A., 147, 153, 245, in *Archaeologia*, 55, 99, 104, 145, 153. in *P.S.A.*, 133.
Sneinton, Turf maze at, 269, 272.
Snell, Rev. A., 8.
Soldan, in *Nassauische Annalen*, 74 n.
Solsbury Hill, 172.
Somerset,
Belgic immigrations in, 80.
La Tène art in, 122.
Celts and Belgae in, 173.
Celtic immigrants in, 158.
Somersham, settlement at, 164.
Somerton, Turf maze at, 273.
South Lodge Camp, 79, 167.
Finger-print pottery from, 104.
Incised pottery from, 106, 107.
Southampton, 176 n.
,, Earl of, 195 (and see Wriothesley).
Southchurch, Pot from, 163.
Southern Hill, Reading, 112, 147, 153 n., 163.

Spain,
Celtic invasions of, 79, 150, 153, 154.
Connection with Britain, 79, 80, 84, 154, 159.
Spalding Priory, 211.
Sparrow, William, cuts turf maze at Hilton, 272, 273.
Sparsholt, Church in Chilcombe Manor, 192.
Speed, J., 267.
Stamford, 254.
Stampfuss, *Das Germanische Hügelgräberfeld Diersfordt*, 152 n., 153 n. in *Mannus*, 152 n.
Standlake, Pottery from, 165.
Stanmore,
Hallstatt site and oven at, 3, 4 map, 5 n., 164, 176.
Pottery from, 110 (see also Battery Hill).
Stanyng, 255.
Staple Garden (Winchester), British Coin from, 185.
Star Inn (Winchester), Early Bronze Age burials under, 180.
Steinsburg, Stronghold at, 74, 80.
Stephens, Dean, plants trees, 285.
Life of Dean Hook, 283 n.
Stevens, C. E., 8.
Stevens, C. G., 8.
Stoke, 192.
Stopher, the late Alderman, 181, 185.
Stour, the Great, Caesar crosses, 49.
Stow, *Survey of London*, 250 n., 252 n., 255 n.
Stratford, Bishop, 253.
Stratton, J., 7.
Stromberg, the, Vitrified fort at, 65.
Strutt, *Sports and Pastimes*, 272 n.
Sussex, Hallstatt culture in, 147.
Svoronos, 186.
Swaffham, Settlement at, 163.
Swallowcliffe Down,
Settlement on, 167.
Pits at, 43.
Ditch on, 96.
Pottery from, 99, 100, 106, 109-111, 115, 116, 120.
Saddle-querns from, 125.
Whetstones from, 134.
Spindlewhorls from, 135.
Absence of worked flint at, 149
Swarling-Aylesford cremation culture, 171.
Sweden, Germanic migration from, 152.
Swell, 250.
Swiss lake-dwelling culture, the, 5 n.; Connection with Britain, 147, 149, 151, 152 (and see Alpine folk).
Synay, Mount (see Sinai).

Tabula Legum (see Winchester College)
Tacitus, *Agricola*, 83 n.
Taunton Museum, Pottery from Ham Hill in, 97, 165.
Taunus region, Hill forts in, 70 ff.; Celts driven into, 156.
Taxatio Ecclesiastica (Record Commission), 193.
Teg Down, Earthworks on, 5 n.
Telegraph Hill, Pottery from, 5 n., 164.
Tempest, The, Mention of mazes in, 272 n.
Templar, Knights, 251.
Terrington St. John's, 211.
Teutones, 81.
Teutonic peoples, blood, etc. (see Germans).
Teversal, 250.
Thalling, Bird-figures on ornament from, 129.
Thames, the,
Pottery from, 110, 163, 165.
Immigrants in estuary of, 146.
Hallstatt sword from, 158.
La Tène III scabbard from, 184.
Theale, Pottery from, 107, 111, 163.
Theobalds, Maze at, 273.
Theseus, 270.
Thetford, Thomas, Abbot of Bermondsey, 203 n.
Thomas,
in *Nassauische Annalen*, 81 n.
in *Mitteilungen des Vereins für Nassauische Altertumskunde und Geschichtsforschung*, 70 n.
in *Annalen des Vereins, usw.*, 73 n.
Thompson, Prof. A. Hamilton, 211 n., 212 n.
Thuringia, Celts and Germans in, 80.
Thurnam, Davis &, *Crania Britannica*, 67.
Tichborne, 192.
Tidbury Ring, 4 map, 5 n.
Timsbury, British coins from, 174.
Tincommius, Coin of, 186.
Tin trade, 79-80.
Titania, 272 n.
Titchfield, 196.
,, Baron (see Wriothesley).
Tomkins, Dymond &, 68.

Toms, H. S.,
in *Brighton and Hove Archaeologist*, 78 & n.
in *Sussex Archaeological Collections*, 14 n., 136.
on Oyster-shells, 136.
Tonnochy, A. B., 245 n.
Towersey, 253.
Towthorpe, 256.
Treir Ceiri, 38 n.
"Trench" (on Hills), 265, 276, 281, 284.
Trencrom, 80.
Triplow Heath, Cremation in barrow at, 168.
Trojan War, the, 270.
Trollope, Edward, in *Archaeological Journal*, 270 & n., 271 & n., 279 & n.
Troy, 270, the game of, 272, 273.
Walls of, 273. [163.
Trumpington, Pottery from, 102, 111,
Trundle, the, near Goodwood, 166.
Similarity to St. Catharine's Hill, 78, 106.
Pottery from, 106, 115, 120, 145.
Post-hole in entrance to, 47, 78.
Chalk cups from, 123.
Oysters eaten at, 136.
Relation to Chichester, 172.
Tubney, Pot from, 163.
Tugford, 250.
Tunbridge (Winchester), 265.
Turnford, Pottery from, 100, 164.
Twyford, 1.
British coin from, 174.
in Chilcombe Manor, 192 & n.
Twyford Down, 1, 2; La Tène brooch from, 5 n., 127.

Uffington Castle, Construction of rampart at, 38, 68, 69.
Ulrome, Pottery, etc., from, 167.

Valor Ecclesiasticus (Record Commission), 194 n.
Vaughan, Canon, *Winchester Cathedral Close*, 185 n.
Vauville, in *Bulletin de la Societé Préhistorique française*, 81 n.
Veeck, in *Fundberichte aus Schwaben*, 74 n.
Venetian bucket of the 7th century B.C., 2, 133.
Venta Belgarum (and see Winchester),
Origin of, 169-188.
Cantonal capital, 6, 170, 188.
Cemetery of, 183.
Verica, Coins of, 185.
Verney, Ralph, 276 n.
Vert-la-Gravelle, Late Bronze Age Pottery from, 156 n.
Verulam, Woodland site of, 173.
Victoria, Queen, Coin of, 244.
Victoria and Albert Museum, the, 245.
Victoria County History
of Cornwall, 204 n.
of Devon, 68 n.
of Essex, 105.
of Hampshire, 178 n., 193 n., 194 n., 223, 224 n., 250 n., 253 n.
of Huntingdonshire, 164.
of Northamptonshire, 165.
of Somerset, 83 n.
Villanovan culture, 130, 131.
Virgil, *Lusus Troiae* in, 270, 272, 273.
Vitrified forts, 65-67.

Waddon, Pottery from, 166.
Wales, Roman Hill-forts in, 72, 83 & n., 84.
Stone walls of forts in, 38.
Slate in, 202, 203.
Mazes in, 272.
Walkelin, Bishop, 223.
Waller, 176 n.
Wallet, French antiquary, 271.
Walthamstow, Pottery from, 102, 103, 112, 146, 163.
Walton, 211.
Walton-on-Thames, Pottery from, 166.
Wandsworth, Pottery from, 165.
Wansdyke, Construction of, 14.
War Ditches, Cherry Hinton, Pottery from, 163.
Ward-Evans, S., 175, 176, 178, 183, 185 & n., 186, 199 n.
Warden of Winchester College (see Winchester College).
Warren, F., 8; Messrs., 185.
Warren, W. T., *Guide to Winchester*, 178 n., 181 n.
Warton, Joseph, 276.
Warton, Thomas, *Mons Catharinae*, 258, 276, 277, 281.
Wash, the, Immigrants in, 146.
Waterhouse, C. O., 8.
Watts, King & (see King & Watts).

Webb, *Reign and coinage of Carausius*, 139.
Wedhampton, Pottery from, 167.
Weeke, Socketed bronze axe from, 5 n.; Church in Chilcombe Manor, 192.
Weeting Park, Cremation in barrow at, 168.
Wessex,
Deverel-Rimbury Urn culture in, 141, 148. [157.
Hallstatt immigrants in, 147, 148,
Christianity in, 192.
West Furze, Lake-settlement at, 146; Pottery, etc., from, 167.
Westmorland, Slate in, 202.
Weston Birt, 252. [68.
Weston-super-Mare, *Visitor's Guide to*,
Weybridge, Pottery from, 111, 166; Bucket from, 133.
Weybridge Museum, Pottery in, 166.
Wheeler, Dr. R. E. M., 15,
in *Transactions of the Honourable Society of Cymmrodorion*, 72 & n., 73, 81, 83.
in *Antiquaries Journal*, 145, 147, 551 n.
in *Antiquity*, 146.
White Minster (see St. James', Winchester).
White Ship, the, 254.
Whitstone, 256.
Wickham, Rev. H. J., 274, 278, 279.
Wiesbaden, Pottery from near, 151.
Wilbraham, Pottery from, 102.
Wilde, Mrs. E. E., 127, 181 n.
Wildenburg, Inturned entrance at, 81.
William III, Count of Hainault, 243.
Williams Freeman, J. P., 8,
in *H.F.C.*, 12, 67.
in *Field Archaeology as illustrated by Hampshire*, 5 n., 28, 174 n., 230 n.
Willoughby Gardner, in *Arch. Camb.*, 83 n.
Wilmington, Bronze weapon in pot from, 167. [167.
Wilsford Down, Pottery from pits on,
Wiltshire, Hallstatt immigrants in, 147.
Win Hill, Hitcham, Pit dwellings at, 163.
Winchester, 1, 2, 8, 169, 171, 174, 190, 194, 259, 266, 275, 277, 278.
Evidence for Pre-Roman occupation of, 4, 172, 173, 175, 177, 178, 182-188.
was it a Belgic *Oppidum*? 187-188.
Early Bronze Age burials at, 180, 181.
Winchester,
Beaker from, 182.
La Tène I brooch from, 5 n., 127.
Currency bars perhaps from, 182.
British and other early coins from, 174, 185, 186.
La Tène III burials at, 183.
La Tène III dagger from, 184.
Roman (Venta Belgarum), 6, 170, 187, 188.
Rubbish pits of, 178.
Cemetery of, 183.
Bishops of (see Walkelin, Blois, Lucy, Pontissara, Woodlock, Stratford, Wykeham, Wolsey, Gardiner, Horne).
British Archaeological Association meets at, 197.
Cartularies, 192 & n.
Cathedral, 1, 220, 275,
Bronze ring found under, 185.
Column bases in, 223.
Attendance of College at, 262.
Church of St. Catharine in, 193, 252.
City Museum,
Prehistoric Pottery, etc., in, 5 n., 127, 181 n., 182.
Objects from St. Catharine's Hill in, 8, 175, 199 n.
La Tène I brooch in, 5 n., 127.
La Tène III dagger in, 184.
Roman fibula in, 139.
Mediaeval pottery in, 234, 239 fig.
College (and see Wykeham),
Ad Portas, Geo. III received, 282.
Archaeological Society,
Winchester, its History, Buildings, and People, 192 n.
Winchester College, 262 n., 265 n.
Commoners at,
frequently elected to College, 275.
sent on Hills, 281.
Junior Match with College, 284.
Dulce Domum, 275-278.
Election Roll, 275.
Fifth Book, 275.
Founder's Kin, 275.
Headmasters of, 263, 265, 276 (and see Horman, Johnson, Burton, Warton, Ridding, Fearon).
Library (see Moberly Library).
Long Roll, 275 and n.
Organist (see Reading).

College,
Praefect of Hall, [265.
calls names at Middle Gate,
calls names on Hills, 285.
action of in 1867, 284.
Praefects, 281, 283, 284,
smoke, 283.
Remedies, resort to Hills on, 265, 266, 281.
Remedy Ring, 265.
Resort to Hills by, 7, 196, 232, 259, and Part III passim,
Connection with Labyrinth, 7, 269, 274-280, 281, 285.
Second master of (see Warton).
Statutes of, 260, 262, 263.
Tabula Legum, 264, 284.
Warden and Fellows of, 7.
Wardens of, 250, 262, 263 (and see Chandler, Coxed, Huntingford, Barter).
Corporation, Surveyor to the, 282 n.
Football, 265.
Public Library, 181.
Tarrages, 179.
Trade token, 244.
(and see Ball Court, Blackbridge, Broadway, Bubb's Cross, Chamber Court, Chapel, Cloisters, Grass Court, Guildhall, High Street, Hyde Street, Meads, Middle Gate, Muniment Room, Oram's Arbour, Old Commoners, School, St. Clement's Street, St. Faith's, St. James', St. Peter's, St. Swithun's, Staple Garden, Star Inn).
Winedi, or Winedaeg, 243.
Wing, Turf maze at, 270.
Winkelbury Camp, 167, 170,
Post-holes under rampart of, 69.
Pottery from, 78.
Winnall, Church in Manor of Chilcombe, 192.
Winterbourne Bassett, 254.
Winterbourne Monkton Down, Pottery from, 167.
Wiseman, Anthony, Token of, 244.
Wisley,
Pit-dwellings and kilns at, 167.
Pottery from, 102, 103, 106, 107, 110, 113, 115, 118, 119, 121, 145.
Woderlarke, Robert, 254.
Wolsey, Thomas Cardinal, Register of, 195.
suppresses St. Catharine's Chapel, 190, 194, 259 n.
Wolverton, 256.
Woodcuts Common, La Tène III village at, 170.
Woodlock, Bishop, 253.
Register of, 253 n.
Woodminton, Barrows at, 141, 145.
Woodstone, Settlement at, 164.
Woodward, *History of Hampshire*, 179 & n., 285 n.
Woodyates, Antler picks from, 125.
Wookey Hole, 80, 174.
Wooll, *Life of Warton*, 282 n.
Wordsworth, Charles, 260 & n., 276 n.
Worlebury, Rampart of, 68, 71.
Murus Duplex construction at, 38 n.
Destructive slaughter at, 174.
Wormington, 254.
Worth, Pottery from, 103, 164.
Worthing, Pottery with bronze hoard from, 147, 167.
Worthy Down,
Hallstatt and La Tène settlement at, 3, 4 map, 5 n., 164, 169, 170, 174, 177, 187.
Pottery from, 109, 112, 115, 119, 120, 122, 185.
Fossil echini from, 135.
Inhumation at, 168, 181.
Currency bars from, 182.
Wriothesley, Sir T., of Titchfield, his career, 196.
leases St. Catharine's Chapel, 195, 229, 259.
destroys St. Catharine's Chapel, 7, 195, 220, 267.
Wuduburh, 78, 79, 167.
Wye, Pottery from, 164.
Wykeham, 211; Bishop William of, his Statutes for Winchester College, 260, 262, 263.
his Register, 194 n.
Taxatio ecclesiastica of Winchester Diocese, 194.
Wyman Abbott (see Abbott).
Wytham, Pottery from, 163.
Wyville, 256 n.

Yarnton, Pottery from, 165.
Y-Corddyn, Entrance to, 77 map, 83.
Yorkshire,
Celtic invasion in, 3, 79.
Barrows and chariot burials in, 159 & n.

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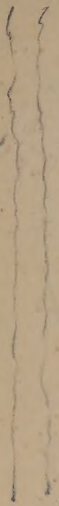

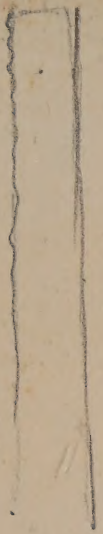

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